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# These symbols indicate important product features:



**Explosion proof** 



**RS232 interface** 



**Ethernet interface** 



**Autoclavable** 



Sterile



Accessories required to use the product



**Requires specialist installation** 



Item is heavy and difficult to transport



Product requires chemicals or reagents



Documentation available on request



**USB** connection



Selected for you



CE marking conform with IVD MDD 98/79 EC for In-vitro Diagnostics









Warranty





















# SAMPLING AND CELL CULTURE

The right sample selection - taken at random or continuously, inline or online - is the basis of analysis. This chapter lists all the instruments necessary to take a sample, including products for sampling in cell culture.

#### Sampling

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#### Cell culture

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#### Spoons, PharmaSpoon Bürkle



#### Stainless steel V4A (1.4404), high polish finish

For taking samples of powdery substances, intermediate products and material in the pharmaceutical industry. Made of materials with excellent surface qualities to prevent cross-contamination.

- Possible residues are even visible in the trace sector (µg sector)
- Also suitable for sterile sampling

Length (mm)	Capacity (ml)	Pk	Cat. No.
650	500	1	300-0075

#### Samplers, single-use, sampling system





Suitable for all industries (pharmaceutical, food, chemical, cosmetic, biotechnology, etc.). Pre-sterilised versions available. Length 500 or 1000 mm, diameter 21 mm.

- FDA conformity, BSE-,TSE-free, full batch traceability, ATEX rated
- Risk of cross-contamination is eliminated
- Assembled in a cleanroom environment
- Economical save time and money

Each sampler is individually wrapped, 20/box.

Description	For volume (ml)	Sterile	Pk	Cat. No.
Disposable PowderThief for sampling powders	s and granules			
HDPE, 1000 mm	1	-	20	300-2022
HDPE, 1000 mm	1	+	20	300-2023
HDPE, 1000 mm	5	-	20	300-2024
HDPE, 1000 mm	5	+	20	300-2025
HDPE, 1000 mm	10	-	20	300-2016
HDPE, 1000 mm	10	+	20	300-2017
HDPE, 1000 mm	20	-	20	300-2026
HDPE, 1000 mm	20	+	20	300-2027
HDPE, 500 mm	1	-	20	300-2028
HDPE, 500 mm	1	+	20	300-2029
HDPE, 500 mm	5	-	20	300-2030
HDPE, 500 mm	5	+	20	300-2031
HDPE, 500 mm	10	-	20	300-2018
HDPE, 500 mm	10	+	20	300-2019
HDPE, 500 mm	20	-	20	300-2020
HDPE, 500 mm	20	+	20	300-2021
Disposable LiquiThief for sampling low viscosi	ty liquids (e.g. water), sampling hole is 1.5 mm			
HDPE, 500 mm	100	-	20	300-2002
HDPE, 500 mm	100	+	20	300-2003
HDPE, 1000 mm	190	-	20	300-2000
HDPE, 1000 mm	190	+	20	300-2001
PP, 1000 mm	190	-	20	300-2004
PP, 500 mm	100	-	20	300-2005

Description	For volume (ml)	Sterile	Pk	Cat. No.							
Disposable ViscoThief for sampling creams and gels, sampling hole is 10 mm											
HDPE, 500 mm	100	-	20	300-2012							
HDPE, 500 mm	100	+	20	300-2013							
HDPE, 1000 mm	190	-	20	300-2010							
HDPE, 1000 mm	190	+	20	300-2011							
PP, 500 mm	100	-	20	300-2015							
PP. 1000 mm	190	-	20	300-2014							





#### Sampler, Tubus Bürkle



Sampler for free flowing bulk goods up to approx. 10 mm diameter. This makes it possible, for example, to remove hazel nuts, blends of tea, grain or similar items from large sacks.

- Also for coarse grained bulk goods
- Made of stainless steel V4A (1.4404)/AISI 316L
- Special tip geometry

Corresponds to ISTA standard for seed lengths of 10 mm (wheat, oats) and 5 mm (flax, vetches).

Description	Length (mm)	Ø (mm)	Pk	Cat. No.
Sampler	400	40	1	223-0083
Sampler	800	40	1	223-1252

#### Sampler, SiloDrill Bürkle



When bulk goods are transported they may separate out and surface samples may not be representative. Using extension rods, the SiloDrill allows samples to be taken from depths of up to 3,5 metres. The sampler is opened manually once it has reached the required depth.

- Sampling chamber is opened and closed manually
- Drill tip for easy boring
- Stainless steel V2A (1.4301)/AISI 304 or aluminium

Description	Length (mm)	Ø (mm)	Volume (ml)	Material	Pk	Cat. No.
Sampler	1500	90	400	Aluminium	1	300-1019
Sampler	1500	90	400	Stainless steel V2A (1.4301)	1	300-0108
Description					Pk	Cat. No.
Accessories						
Transport case					1	312-1141





300-1020

#### Sampler, StickProof Bürkle

Extension rod, 1000 mm



Stainless steel sampler for powders. The conical inlet allows for collection of different sample sizes, up to approximately 50 ml. Constructed without edges, grooves or crevices for easy cleaning. The sample is collected directly into the sampling bag which is held in place with the included clamp.

 $Stick Proof borehole\ diameter\ 25\ mm; chamber\ length\ 120\ mm.\ Sampling\ bags:\ 170\times120\ mm\ for\ 400\ ml.$ 

- Especially slender tip can be inserted easily and deeply
- Electropolished surface
- Variable sample size up to 50 ml
- Stainless steel V4A (1.4404)/AISI 316 L

Complete with clamp and 100 sampling bags PE.

Description	Length (mm)	Ø (mm)	Volume (ml)	Pk	Cat. No.
Sampler	410	25	50	1	312-1176
Sampler	1100	25	50	1	300-0117
Description	Pk	Cat. No.			
Accessories					
Packaging bags with clos	100	113-5414			





#### Sampler, SiloPicker Bürkle



Made of stainless steel, V4A. For sampling bulk goods at depths of up to 3,5 metres, depending on the density of the bulk goods to be sampled. Inserting the sampler into the bulk goods closes the collection chamber. At the desired depth, the collection chamber is opened by withdrawing the sampler, the chamber is filled and can be pulled out and collected.

- Easy handling
- Sampler length 1000 mm, may be extended up to 3500 mm using extension rods
- Stainless steel V4A (1.4404)/AISI 316 L

Description	Length (mm)	Immersion depth (mm)	Pk	Cat. No.
Sampler	1000	3500	1	300-1025
Description			Pk	Cat. No.
Accessories				
SiloPicker handle			1	300-0103
Transport case			1	312-1141
SiloPicker sample container			1	300-0105
Extension rod 500 mm			1	300-1026
Extension rod 1000 mm			1	300-1037

#### Zone samplers Bürkle



For sampling bulk goods, cross-sectional samples can be taken from different sample depths. Suitable for use with a range of sample substrates from fine powder to coarse grain. Multi sampler has three or five separate chambers for taking samples at multiple depths in one action. Uno sampler has one chamber for taking a sample at one specified depth. All layer sampler has no chambers, three or five inlets and this allows one sample to be taken at multiple depths. Jumbo sampler has no chambers and three, five or seven inlets; with a 50 mm tube diameter this is ideal for larger grain sizes and quantities.

- Easy to clean, removable tip
- Colour coding (Multi and Uno samplers)
- Ultra-pure materials: Stainless steel V4A (1.4404)/AISI 316 L, PTFE or aluminium
- 3 lengths from 550 mm to 1500 mm, Jumbo up to 2500 mm
- Samplers have smallest possible gap between inner and outer tubes

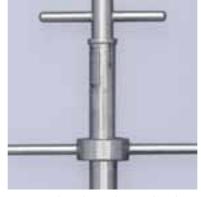
Description	Length (mm)	Immersion depth (mm)	Chambers	Ø (mm)	Volume (ml)	Pk	Cat. No.
All layer samplers							
All layer sampler, V4A	550	430	3	25	70	1	312-0079
All layer sampler, V4A	850	710	3	25	130	1	300-0049
All layer sampler, V4A	1500	1355	5	25	260	1	300-0050
All layer sampler, aluminium	550	430	3	25	70	1	312-1183
All layer sampler, aluminium	850	710	3	25	130	1	312-1185
All layer sampler, aluminium	1500	1355	5	25	260	1	312-1184
Multi samplers							
Multi sampler, V4A/ PTFE	550	430	3	25	14	1	312-1101
Multi sampler, V4A/ PTFE	850	710	3	25	17	1	312-1102
Multi sampler, V4A/ PTFE	1500	1355	5	25	17	1	312-0077
Multi sampler, V4A	550	430	3	25	14	1	312-0080
Multi sampler, V4A	850	710	3	25	17	1	312-0081
Multi sampler, V4A	1500	1355	5	25	17	1	312-0082

Description	Length (mm)	Immersion depth (mm)	Chambers	Ø (mm)	Volume (ml)	Pk	Cat. No.
Multi samplers							
Multi sampler, aluminium	550	430	3	25	14	1	312-1111
Multi sampler, aluminium	850	710	3	25	17	1	312-1112
Multi sampler, aluminium	1500	1355	5	25	17	1	312-1113
Uno samplers							
Uno sampler, V4A/PTFE	550	430	1	25	17	1	312-1131
Uno sampler, V4A/PTFE	850	710	1	25	17	1	312-1132
Uno sampler, V4A/PTFE	1500	1355	1	25	17	1	312-0078
Jumbo samplers							
Jumbo sampler, all layer, open inner tube, aluminium	850	710	3	50	880	1	312-1121
Jumbo sampler, all layer, open inner tube, aluminium	1500	1355	5	50	1700	1	312-1122
Jumbo sampler, all layer, open inner tube, aluminium	2500	2355	7	50	2900	1	312-0084
Jumbo sampler, multi, closed chambers, aluminium/PTFE	850	710	3	50	390	1	300-0051
Jumbo sampler, multi, closed chambers, aluminium/PTFE	1500	1355	5	50	650	1	300-0052
Jumbo sampler, multi, closed chambers, aluminium/PTFE	2500	2355	7	50	910	1	300-0053

Description	Pk	Cat. No.
Accessories		
Transport case	1	312-1141
Cleaning brushes, PVC/stainless steel, 25 mm Ø, length 400 mm	1	300-0109
Cleaning brushes, PVC/stainless steel, 25 mm Ø, length 600 mm	1	331-2173
Cleaning brushes, PVC/stainless steel, 25 mm Ø, length 800 mm	1	331-2172
Cleaning brushes, PVC/stainless steel, 25 mm Ø, length 1000 mm	1	331-2170
Cleaning brushes, PVC/stainless steel, 50 mm Ø, length 1000 mm	1	300-0110
Cleaning brushes, PVC/stainless steel, 50 mm Ø, length 3000 mm	1	300-0111
Quali-Paper, format 100×25 cm, for emptying collected samples	50	300-0112
Sealing sleeves for zone samplers, PP, sterilisable, 50 mm Ø	1 SET	300-0113
Sealing sleeves for zone samplers, PP, sterilisable, 25 mm Ø	3	300-0114
Emptying device, stainless steel V2A, complete with three funnels	1	300-0058
Emptying funnel, separate, V2A	1	300-0059

#### Pharma Zone Samplers, Novartos Multi Bürkle





Stainless steel V4A (1.4404/1.4571). The Novartos pharma zone sampler is designed to comply with FDA guidelines for unit dose sampling. It is now possible to withdraw a double sample without inserting the lance repeatedly into the bulk material. Mixing is mainly prevented in this way. Complete filling and emptying of sample chambers has been improved substantially using computer-optimised geometry. There are no crevices or dead spaces where sampling residues can be collected for easy cleaning.

- Novartos Multi enables all-layer samples with 14 sample chambers for up to seven sample zones for an all-layer sample.
- The sample inserts fit precisely and can easily be replaced
- Inserts are available in volumes from 0 to 2,0 ml

VR 9

- The insertion depths can easily be read from the laser engraved depth scale
- · Groove-free and handpolished

Description	Length (mm)	Ø (mm)	Pk	Cat. No.
Novartos Multi, stainless steel V4A, without inserts	1000	25	1	300-0126

Description	Pk	Cat. No.
Accessories		
Transport case	1	312-1141
Sampling inserts for Novartos Multi	1	300-0187
Sampling inserts for Novartos Multi, capacity 0,5 ml	1	300-0188
Sampling inserts for Novartos Multi, capacity 1 ml	1	300-0189
Sampling inserts for Novartos Multi, capacity 1,5 ml	1	300-0190
Sampling inserts for Novartos Multi, capacity 2 ml	1	300-0191



## Milk powder sampler, Milky Bürkle



Stainless steel construction. Developed for sampling milk powder. The collector is inserted into bags or casks and the sample is removed using a half-shell shaped lance. Insertion depth 385 mm, total length 480 mm, outer diameter approximately 28 mm.

- Sterilisable
- Stainless steel V4A (1.4404)/AISI 316 L

Acc. EN ISO 707 and IDF (Int. Dairy Federation)

Description	Length (mm)	Immersion depth (mm)	Ø (mm)	Volume (ml)	Pk	Cat. No.
Sampler	480	385	28	150	1	300-0022



#### Ice borer Bürkle



Stainless steel. Ideal both for deep-frozen products in the food industry and semi-solid substances. The sharp sawing crown of the hollow borer rapidly cuts into the sample. A cylindrical sample (cross sectional sample) with a diameter of 16 mm and a length of up to 200 mm can be cut out. Consists of three parts: borer, borer head for use in conventional drills and rod for pressing the cylindrical sample out of the borer head.

- Can be sterilised
- Very sharp
- Complete with case
- Stainless steel V4A (1.4404)/AISI 316L

Description	Length (mm)	Ø (mm)	Pk	Cat. No.
Ice borer complete, inner Ø 16 mm, outer Ø 21 mm	200	16	1	312-0072
Ice borer complete, inner Ø 50 mm, outer Ø 54 mm	200	50	1	312-0086



#### Ice sampler Bürkle



Stainless steel, V4A (1.4404)/AISI 316 L. Developed for sampling from frozen materials and similar substances. The ice sampler screws into the sample material and simultaneously extracts and conveys the sample into the sampling cylinder. The sampling cylinder is detachable. The ice sampler is electropolished and does not have any flutes for perfect and easy cleaning.

- Storilicable
- Electropolished
- Simple cleaning

Description	Length (cm)	Ø (mm)	Volume (ml)	Pk	Cat. No.
Ice sampler complete	105	38	50	1	300-1049
Ice sampler complete	30	38	50	1	300-1047
Ice sampler complete	55	38	50	1	300-1048
5				p.l	Cat. No.
Description				Pk	

Description	Pk	Cat. No.
Accessories		
Transport case for ice sampler	1	300-1050



#### Hand-Drill, QualiRod Bürkle



Conically shaped hand-drill, with sharp cutting edges and a solid handle. Ideal to cut out samples from soft, paste-like substances (cheese, butter, clay, loam, soap, wax, etc.).

- Stainless steel V2A (1.4301)/AISI 304
- Sterilisable
- Conforms to standards EN/ISO 707

#### Weight 96 g.

Description	Length (cm)	Immersion depth (mm)	Pk	Cat. No.
Hand-drill, conical	17,5	120	1	300-0018
Hand-drill, conical	17,5	170	1	300-0140

### Core samplers, QuickPicker Bürkle



Made of stainless steel or PP, transparent, sample bottles made of PE. The QuickPicker is appropriate when bulk goods are withdrawn directly from sacks, bags or open containers. The sample is filled directly into sample bottles.

Sampling depth 300 mm, diameter 25 mm, length 500 mm, 75 ml volume.

- Removable tip
- Easy to handle and clean
- No edges or crevices, no residual sample material

**Delivery information:** QuickPicker is delivered complete with 2 sample bottles and cleaning brush.

Description	Length (mm)	Immersion depth (mm)	Ø (mm)	Volume (ml)	Pk	Cat. No.
Sampler, PP, transparent	500	300	25	75	1	312-0085
Sampler, stainless steel V4A (1.4404)/AISI 316 L	500	300	25	75	1	312-1175

Description	Pk	Cat. No.
Accessories		
Sample bottle, LDPE, 250 ml	1	300-0118
Sample bottle, PP, 250 ml	1	331-2612
Transport case	1	312-0071

#### Control seal, close-it® Bürkle



Designed to seal the holes in sacks or boxes created when samples are taken, the strong adhesive on the 'close-it®' label allows adhesion to surfaces that are slightly moist, frozen or coated with powder. The aluminium backing creates a vapour barrier and seals the container hermetically. Rolls contain 500 (95×95 mm) or 250 (150×150 mm) stickers.

- Adheres extremely firmly
- Can be written on
- Colour coded for easy recognition

Description	Pk	Cat. No.
95×95 mm		
close-it® 95×95 mm, unprinted white	1 Roll	312-1155
close-it® 95×95 mm, printed black	1 Roll	312-1154
close-it® 95×95 mm, printed red	1 Roll	312-1151
close-it® 95×95 mm, printed yellow	1 Roll	312-1153
close-it® 95×95 mm, printed blue	1 Roll	312-1157
close-it® 95×95 mm, printed green	1 Roll	312-1152
150×150 mm		
close-it® 150×150 mm, unprinted white	1 Roll	312-1166
close-it® 150×150 mm, printed black	1 Roll	312-1162
close-it® 150×150 mm, printed red	1 Roll	312-1161
close-it® 150×150 mm, printed yellow	1 Roll	312-1163
close-it® 150×150 mm, printed blue	1 Roll	312-1164
close-it® 150×150 mm, printed green	1 Roll	312-1165

#### Control seal, close-it® food Bürkle



A control seal with an adhesive approved for use with foodstuffs. The strength of the adhesive is almost as powerful as that of the original. Just like the original, close-it® food has a barrier layer of aluminium foil. This means that close-it® food is suitable for sampling foodstuffs, pharmaceuticals, cosmetics, food additives, even frozen goods where cleanliness is particularly important. Rolls contain 500 (95×95 mm) or 250 (150×150 mm) stickers.

- Adheres very firmly
- Can be written on
- Adhesive complies with the European guidelines for foodstuffs

Description	Pk	Cat. No.
95×95 mm		
close-it® food 95×95 mm, blank, white	1 Roll	312-0074
close-it® food 95×95 mm, printed red	1 Roll	312-0073
close-it® food 95×95 mm, printed yellow	1 Roll	312-0094
close-it® food 95×95 mm, printed blue	1 Roll	312-0095
close-it® food 95×95 mm, printed green	1 Roll	312-0096
close-it® food 95×95 mm, printed black	1 Roll	312-0097
150×150 mm		
close-it® food 150×150 mm, blank, white	1 Roll	312-0076
close-it® food 150×150 mm, printed red	1 Roll	312-0075
close-it® food 150×150 mm, printed yellow	1 Roll	312-0098
close-it® food 150×150 mm, printed blue	1 Roll	312-0099
close-it® food 150×150 mm, printed green	1 Roll	312-0100
close-it® food 150×150 mm, printed black	1 Roll	312-0101

### Control seal, close-it® tape Bürkle



Standard close-it® and close-it® food control seals are also available on a continuous roll. This offers the flexibility to provide a small length of tape to seal a small hole or to mark a specific point. Alternatively longer pieces can be used to repair a long tear quickly, reliably and easily. With its extremely strong adhesive strength, close-it® tapes adhere to a range of different surfaces, where the glue effect of normal adhesive tape quickly reaches its maximum capacity.

- Customisable
- White with tear-off lines
- Available in the classic close-it® design, as well as close-it® tape food, with a food-compatible adhesive
- Can be labelled with permanent ink and provides gas-proof seal

Description	Length (m)	Pk	Cat. No.
Standard			
close-it® tape 95 mm, standard	50	1 Roll	312-0089
close-it® tape 150 mm, standard	50	1 Roll	312-0090
Food			
close-it® tape 95 mm, food	50	1 Roll	312-0091
close-it® tane 150 mm food	50	1 Roll	312-0092

#### Dispensers Bürkle



Dispenser for control seal: close-it®, close-it® tape and close-it® food.

• Two different sizes available

Description	Pk	Cat. No.
Dispenser for close-it® control seal 95×95 mm	1	312-1156
Dispenser for close-it® control seal 150×150 mm	1	312-0083



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### Sample dippers



#### PTFE, inert

Extendible screw-in shafts have a steel core for rigidity and are fully encapsulated in PTFE. The basic unit consists of a container with a single 600 mm shaft. A second shaft (331-0005) can be screwed onto the handle to increase length.

- Very good chemical resistance
- Temperature resistant; suitable for use at high and low temperatures (-200 to +280 °C)

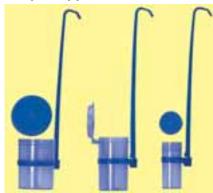
Description	Capacity (ml)	Pk	Cat. No.
Dipper	100	1	331-0006
Dipper	250	1	331-0007
Dipper	500	1	331-0008
Dipper	1000	1	331-0009
Replacement/extension shaft, 600 mm	-	1	331-0005





### COLLECTION

#### Sample dippers



All sample dippers are made of blue polypropylene and consist of a bottle with snap handle. Available with either hinged or screw cap.

- Containers designed for sample collection and dispatch for testing in the same container, eliminating risk of cross-contamination
- Gamma sterilised and individually packed in sealed zip bag to guarantee integrity of sample

Description	Capacity (ml)	Pk	Cat. No.
Sample dippers, hinged cap	90	150	331-3413
Sample dippers, screw cap	40	250	331-3414
Sample dippers, screw cap	180	100	331-3415
Sample dippers, screw cap	125	100	331-3416



#### Dipper, milk, Sterilin® Thermo Scientific



Clear polystyrene container with snap-off handle and leakproof metal screw cap enabling samples to be sent for analysis without risk of cross-contamination.

Capacity: 100 ml Handle length: 385 mm

Description	Capacity (ml)	Pk	Cat. No.
Dipper, milk, Sterilin®	100	100	300-0200

### Sampler for liquids, chemistry scoop Bürkle



For aggressive liquids, with fixed rod. Parts coming into contact with sample media made of PP.

- Three sizes
- Rod length 1000 mm
- Entirely made of polypropylene, no metal parts

Description	Capacity (ml)	Pk	Cat. No.
Chemistry scoop	250	1	331-2110
Chemistry scoop	600	1	331-2111
Chemistry scoop	1000	1	331-2112

### Sampler, Chemo-Sampler Bürkle



#### PF

Specially developed for sample collection of aggressive liquids such as acids, alkalis, cleaning agents, (please check chemical resistance). The sample is directly extracted into the original sample bottle with screw cap. The bottle closure with tamper-evident safety ring ensures reliable sample transfer. The extension rod makes it possible to extract samples to a depth of 2000 mm, e.g. from tanks, silos or tankers. Basic length 1000 mm, extension rod 1000 mm.

- Resistant to acid and alkalis
- Two bottle sizes available

Colour: Grey

Description		Pk	Cat. No.
Chemo-Sampler, complete 1000 mm		1	300-0024
Description	Capacity (ml)	Pk	Cat. No.
Accessories			
PE sample bottle with screw cap	500	1	300-0099
PE sample bottle with screw cap	1000	1	331-0011
Extension 1000 mm long for ChemoSample	er -	1	300-0100

### Sampler for liquids, TeleScoop Bürkle







PP and aluminium. For sampling from pools, tanks, manholes or surface water. Samples can be taken from as deep as 6 metres using the appropriate adjustable aluminium telescopic rod. The rods can be equipped with different attachments using the practical snap-on joint (adjustable angle beaker, pendulum beaker, bottle holder, stainless steel beaker and catch net).

- Rigid cold rolled profile rod
- End stop prevents rods slipping out
- Springs made of stainless steel

Description	Capacity (ml)	Pk	Cat. No.
Angular beakers			
TeleScoop, angular beaker	600	1	331-2130
TeleScoop, angular beaker	1000	1	331-2131
TeleScoop, angular beaker	2000	1	331-2132
Pendulum beakers			
TeleScoop, pendulum beaker, stainless steel	1000	1	331-0041
TeleScoop, pendulum beaker, PP	600	1	331-2120
TeleScoop, pendulum beaker, PP	1000	1	331-2121
TeleScoop, pendulum beaker, PP	2000	1	331-2122

Continued on next page



Description	Capacity (ml)	Pk	Cat. No.
Bottle holders			
TeleScoop, bottle holder	750	1	331-2145
Stainless steel beakers			
TeleScoop, stainless steel beaker V2A	1000	1	331-0040
Catch nets			
Depth catch net, PP/PA, blue, 190×430 mm, mesh width 2 - 5 mm		1	331-0042
Surface catch net, PVC/PA, blue, 310×280 mm, mesh width 2 - 5 mm		1	300-0061
Telescopic rods			
TeleScoop, telescopic rod, 650 - 1200 mm		1	300-0037
TeleScoop, telescopic rod, 1250 - 2500 mm		1	300-0026
TeleScoop, telescopic rod, 950 - 2800 mm		1	300-0038
TeleScoop, telescopic rod, 1150 - 3000 mm		1	300-0039
TeleScoop, telescopic rod, 1650 - 4500 mm		1	331-2143
TeleScoop, telescopic rod, 1750 - 6000 mm		1	300-0040

### Sampler for liquids, LiquiSampler Bürkle



Made of ultra-pure and chemically inert PTFE/FEP for contamination free sampling. Perfect for sampling from open and closed barrels, vats, tanks, silos, open waters (ponds, streams, lakes, rivers). Fits all commercially available vats and barrels with openings of at least 25 mm diameter. Easy to clean as all surfaces are free of pores and crevices, preventing accumulation of dirt. Only round screw threads proven in foodstuffs hygiene are used. Colour coded push buttons in red, blue, green, yellow, white and black.

- Disassembly and cleaning is extremely simple
- Easy to use, one hand push-button operation
- Transparent

Push-button set

• Suitable for point sampling, cross-sectional sampling, bottom sampling

According to DIN 53 242

Description	Capacity (ml)	Pk	Cat. No.
LiquiSampler, PP, 600 mm	150	1	331-0036
LiquiSampler, PP, 1000 mm	250	1	331-2152
LiquiSampler, PP, 2000 mm	500	1	331-2153
LiquiSampler, PTFE/FEP, 600 mm	150	1	331-0037
LiquiSampler, PTFE/FEP, 1000 mm	250	1	331-2150
LiquiSampler, PTFE/FEP, 2000 mm	500	1	331-2151
Description		Pk	Cat. No.
Accessories			
Cleaning brushes, PVC/stainless steel, 2	5 mm Ø, length 1000 mm	1	331-2170

#### Sampler, MiniSampler Bürkle



The single-use, flexible, suction hose can be quickly replaced, thus ensuring that the samples are never contaminated. If necessary, a new hose can be used for every single sample. Due to its small diameter (8 mm) and flexibility the hose can reach sampling areas which are otherwise inaccessible. Maximum suction lift is five metres depending on viscosity.

- Can be used with oils
- Various accessory bottle sizes available

**Delivery information:** Supplied complete with one vacuum pump, 10 PE bottles (100 ml), PE suction hose (10 m), one hose cutter, one hose weight made of stainless steel and 20 seal-it bottle seals.

Description	Pk	Cat. No.
MiniSampler PE complete, capacity 100 ml	1	300-1021
MiniSampler PTFE complete, capacity 180 ml	1	312-1171

Description	Pk	Cat. No.
Accessories		
Suction hose, PE, Ø 6 mm, wall thickness 1 mm	100 m	300-1045

1 KIT

300-0115



### Sampler for viscous substances, Mini ViscoSampler Bürkle



V4A stainless steel, electropolished. For viscous media such as paste, sludge, cream or oil. Supplied with a 2 mm suction nozzle which can be replaced with drills that have a wider aperture for sampling substances with higher viscosity. The sampler has a diameter of 15 mm and is available in three lengths.

- Easy to clean
- Ideal for pharmaceutical industry
- Sterilisable
- Stainless steel V4A (1.4404)/ AISI 316L

Description	Pk	Cat. No.
Mini ViscoSampler 600 mm	1	300-1032
Mini ViscoSampler 1000 mm	1	300-1027
Mini ViscoSampler 1500 mm	1	300-1028

Description	Pk	Cat. No.
Accessories		
Suction nozzle Ø 2 mm	1	300-1029
Suction nozzle Ø 4 mm	1	300-1030
Suction nozzle Ø 6 mm	1	300-1031

### Sampler for medium viscosity substances, ViscoSampler Bürkle



Made of transparent PP or ultra-pure and chemically inert PTFE/FEP for contamination-free sampling. The medium to be sampled is drawn up and discharged using the suction flask. Developed for viscous substances such as slurry, silt, sediment, oil or emulsions. The sampler can be disassembled and the non porous surfaces completely cleaned.

- Powerful suction for viscous media
- No dirt accumulation
- Disassembling and cleaning is very easy
- Colour coded handles available

Description	Capacity (ml)	Pk	Cat. No.
ViscoSampler, PP	160	1	331-0038
ViscoSampler, PP	300	1	331-2162
ViscoSampler, PP	650	1	331-2163
ViscoSampler, PTFE/FEP	160	1	331-0039
ViscoSampler, PTFE/FEP	300	1	331-2160
ViscoSampler, PTFE/FEP	650	1	331-2161

Description	Pk	Cat. No.
Accessories		
Cleaning brushes, PVC/stainless steel, 25 mm Ø, length 1000 mm	1	331-2170
Set of colour coded handles (blue, green, yellow, white and black)	1 KIT	300-0104

### Sampler, Liquid CupSampler Bürkle



Liquid CupSampler is made of stainless steel and collects liquids of varying viscosity. Media containing particles can also be sampled without difficulty. The sampler can be used in the fields of chemistry, foodstuffs and cosmetics. Diameter 55 mm.

- The cup can be unscrewed from the stem allowing easy cleaning
- Made completely of stainless steel

Description	Capacity (ml)	Pk	Cat. No.
Liquid CupSampler for 100 ml	100	1	300-0025



### Sampler for liquids, UniSampler Bürkle



Hand operated vacuum pump sampler, equipped with a 2,5 metre long PVC hose, the stainless steel weight will sink the end of the hose to the required sampling depth. Liquid only comes into contact with the suction hose and sample bottle.

- Sampler for deep, narrow and hard to reach spots
- Powerful suction for viscous media
- Easy to disassemble and clean

**Delivery information:** Supplied complete in case with handpump, adapter for bottles, sample bottle 1000 ml, PVC suction hose and stainless steel hose weight, 20 seal-it bottle seals.

Description	Capacity (ml)	Pk	Cat. No.
UniSampler with tube	1000	1	300-1042
Description		Pk	Cat. No.
Accessories		r K	Cat. No.
Sample bottle, PP, 100 ml		1	331-2611
Sample bottle, PP, 250 ml		<u> </u>	331-2612
Sample bottle, PP, 500 ml		1	331-2613
		1	
Sample bottle, PP, 1000 ml		<u> </u>	300-1018
Spare PVC hose, 2.50 m long		1	300-1043



### Sampler, UniSampler "Ex" Bürkle



Glass bottle and hose are connected in such a way that they conduct electricity and are grounded via a grounding cable. Operation: Ground the device, immerse the suction hose to the required depth, attach the adapter to the sampling bottle, generate a vacuum with the manual pump and collect the sample, remove the filled sampling bottle, close it and label it.

- Specially developed for sampling flammable liquids of hazardous materials (e.g. gasoline)
- PTB approval D- 333-009 618/00

**Delivery information:** Supplied complete with 4 m hose, glass bottle, vacuum pump and grounding cable in transport case.

Description	Pk	Cat. No.
UniSampler "Ex"	1	300-1044

# Sampler, Vampire Bürkle



Portable, battery-powered hose pump for liquids. Ideal for sampling from barrels, tanks, wells, water separators and sewage and purification systems. Easy to clean; liquid only comes into contact with hose.

- Independent of mains power with rechargeable battery and battery charger
- Sampling directly into the original sampling bottle
- High output volume of up to 2,0 litres/minute and suction depth to 5 metres
- Also suitable for contaminated substances or substances containing particles
- Good chemical resistance

Vampire is packed in a transport case, complete with bottle holder, drive unit, battery charger, hose pump and 5 m PE suction hose.



Sampler, Vampire with bottle	1	300-1024
Description	Pk	Cat. No.
Accessories		
Sample bottle, LDPE, 500 ml	1	300-0174
Basket for sample bottles, 500 ml, 80 mm Ø	1	300-0175
Suction hose Vampire, 4x8 mm, length 1 m	1	300-0176
Suction hose, PE, Ø 6 mm, wall thickness 1 mm	10 m	228-1191
Suction hose, PE, Ø 6 mm, wall thickness 1 mm	100 m	300-1045

826

### Dipping bottle Bürkle



Nickel-plated brass stand, bottle made of glass, 1000 ml capacity, 148 mm diameter, 330 mm high. Lowering cable must be ordered separately (300-1022/-1023).

- For sewage disposal plants, sludge and water samples
- Easy handling

Description	Capacity (ml)	Pk	Cat. No.
Dipping bottle	1000	1	300-1036



### Dipping bottle, "Ex" Bürkle



Manufactured from non-spark producing materials for sampling chemically aggressive liquids, crude oil, mineral oil, fuels and lubricants. Bottle is 89 mm diameter, 385 mm high. Without lowering cable.

- For sampling flammable liquids
- Easy handling
- Three kilogram weight for fast lowering

Description	Capacity (ml)	Pk	Cat. No.
Dipping bottle "Ex"	1000	1	300-1035
Description		Pk	Cat. No.
Description		PK	Cat. No.
Accessories			
Lowering cable, plastic, length 10	m	10 m	223-1200
Lowering cable, copper, length 10	m	10 m	300-0068

#### Dipping vessel Bürkle



Made of brass or stainless steel. One litre capacity, 81 mm diameter, 400 mm high. Lowering cable must be ordered separately.

- For withdrawing liquids from tanks, tanker lorries, etc.
- Easy handling

Description	Capacity (ml)	Pk	Cat. No.
Dipping vessel, brass	1000	1	300-1033
Dipping vessel, stainless steel AISI 304	1000	1	300-1034



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### Manually operated reels Bürkle



The manually operated drum reels are used to lower dipping bottles and immersion cylinders safely to the required depth in shafts, wells and tanks and then to pull them up again. The manually operated drum reels can be equipped with various cables or chains. If flammable or highly flammable liquids are to be collected, then electrically conductive manually operated drum reels must be used together with an earthing cable. The dipping bottles must be made of non sparking metal.

- High winding capacity of up 150 m for cable 2 mm Ø
- Reel width: Inner 44 mm, outer 55 mm, reel Ø: Inner 100 mm, outer 180 mm

Ordering information: Please order the required lowering cable separately.

Description	Pk	Cat. No.
Manually operated reel, PP	1	300-1023
Manually operated reel, PA, conductive	1	300-0015
Manually operated reel, "Ex" with grounding cable	1	300-0056
Description	Pk	Cat. No.
Accessories		
Lowering cable, plastic, length 10 m	10 m	223-1200
Lowering cable, copper, length 10 m	10 m	300-0068



#### Water sampling bottles, sterile



#### PET, virgin food grade with PP caps

Lightweight, durable bottles. Caps designed to shield neck from contamination. Choice of dosed and undosed bottles. Rectangular bottles for better storage with limited space.

- Different coloured caps for easy indentification of test
- Tamper-evident strip to ensure sampling integrity
- Full traceability, batch number and individual bottle number on each label
- Fully recyclable
- Cap diameter: 32 mm

Blue cap: for natural non chlorinated water without sodium thiosulphate

White cap: for chlorinated water dosed with 120 mg/l sodium thiosulphate

Red cap: for chlorinated water dosed with 20 mg/l sodium thiosulphate

Capacity (ml)	Dosage	Cap colour	W×D×H (mm)	Pk	Cat. No.
Square bottles					
500	Undosed	Blue	70x70x192	108	331-0268
500	Sodium thiosulphate (20 mg/l)	Red	70x70x192	108	331-0272
500	Sodium thiosulphate (120 mg/l)	White	70x70x192	108	331-0276
1000	Undosed	Blue	89x89x222	70	331-0269
1000	Sodium thiosulphate (20 mg/l)	Red	89x89x222	70	331-0273
1000	Sodium thiosulphate (120 mg/l)	White	89x89x222	70	331-0277
Rectangular bottles					
350	Undosed	Blue	70x50x174	144	331-0256
350	Sodium thiosulphate (20 mg/l)	Red	70x50x174	144	331-0270
350	Sodium thiosulphate (120 mg/l)	White	70x50x174	144	331-0274
500	Undosed	Blue	70x50x212	144	331-0267
500	Sodium thiosulphate (20 mg/l)	Red	70x50x212	144	331-0271
500	Sodium thiosulphate (120 mg/l)	White	70x50x212	144	331-0275



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#### Water sampling bottles, sterile







#### **HDPE**

The flasks are undosed or dosed with sodium thiosulphate, which inhibits the effects of chlorine, bromine and ozone present in the water when the sample is taken. Square or rectanguar bottles for more efficient storage.

- Dosage in compliance with standards: ISO 5667-3/ISO 19458
- Sodium thiosulphate in powder form
- Tamper evident red screw cap guarantees the sterility of the bottles prior to use
- Shelf life up to 2 years

Capacity (ml)	Dosage	Сар	Packed	Neck Ø ext. (mm)	W×D×H (mm)	Pk	Cat. No.
Square bottles, na	rrow neck						
500	Undosed	Tamper evident screw cap with shaped seal	Carton of 100	22	70×70×160	100	331-0063
500	Sodium thiosulphate (20 mg/l)	Tamper evident screw cap with shaped seal	Individually wrapped	22	70×70×160	100	331-3412
500	Sodium thiosulphate (20 mg/l)	Tamper evident screw cap with shaped seal	Carton of 100	22	70×70×160	100	331-3411
500	Sodium thiosulphate (20 mg/l)	Tamper evident hinged cap with inner lip and safety ring	Individually wrapped	29	70×70×148	100	331-3405
500	Sodium thiosulphate (20 mg/l)	Tamper evident hinged cap with inner lip and safety ring	Carton of 100	29	70×70×148	100	331-340
500	Sodium thiosulphate (20 mg/l)	Screw cap with wad	Carton of 100	37	70×70×146	100	331-006
500	Sodium thiosulphate (120 mg/l)	Tamper evident screw cap with shaped seal	Individually wrapped	22	70×70×160	100	331-0068
500	Sodium thiosulphate (120 mg/l)	Tamper evident screw cap with shaped seal	Carton of 100	22	70×70×160	100	331-342
500	Sodium thiosulphate (120 mg/l)	Tamper evident hinged cap with inner lip and safety ring	Individually wrapped	29	70×70×160	100	331-006
500	Sodium thiosulphate (120 mg/l)	Tamper evident hinged cap with inner lip and safety ring	Carton of 100	29	70×70×148	100	331-342
1000	Sodium thiosulphate (20 mg/l)	Tamper evident screw cap with shaped seal	Individually wrapped	28	82×82×182	77	331-352
1000	Sodium thiosulphate (20 mg/l)	Tamper evident screw cap with shaped seal	Carton of 77	28	82×82×182	77	331-342
1000	Sodium thiosulphate (120 mg/l)	Tamper evident screw cap with shaped seal	Individually wrapped	28	82×82×182	77	331-006
1000	Sodium thiosulphate (120 mg/l)	Tamper evident screw cap with shaped seal	Carton of 77	28	82×82×182	77	331-006
Rectangular bottle	•						
250	Sodium thiosulphate (20 mg/l)	Tamper evident screw cap with shaped seal	Individually wrapped	20	60×45×155	200	331-340
250	Sodium thiosulphate (20 mg/l)	Tamper evident screw cap with shaped seal	Carton of 312	20	60×45×155	312	331-340
Square bottles, wi	de neck						
250	Sodium thiosulphate (20 mg/l)	Screw cap with wad	Individually wrapped	37	57×57×109	182	331-007
250	Sodium thiosulphate (20 mg/l)	Screw cap with wad	Carton of 210	37	57×57×109	210	331-006
500	Sodium thiosulphate (20 mg/l)	Tamper evident screw cap with wad	Carton of 140	55	75×75×128	140	331-005
500	Sodium thiosulphate (120 mg/l)	Tamper evident screw cap with wad	Individually wrapped	55	75×75×128	162	331-005

Capacity (ml)	Dosage	Сар	Packed	Neck Ø ext. (mm)	W×D×H (mm)	Pk	Cat. No.
Rectangular bottles,	wide neck						
1000	Sodium thiosulphate (20 mg/l)	Tamper evident screw cap with wad	Carton of 85	55	92×77×187	85	331-0052
1000	Sodium thiosulphate (120 mg/l)	Tamper evident screw cap with wad	Carton of 85	55	92×77×187	85	331-0053
2000	Sodium thiosulphate (20 mg/l)	Tamper evident screw cap with wad	Carton of 50	58	110×93×237	50	331-0054





#### Bottles, narrow mouth, with screw cap



#### PET, clear or green

For basic sample collecting. Non sterile, lightweight, round.

- 28 mm neck for all bottles
- Green coloured to protect light sensitive material
   Manufactured from food grade PET

Capacity (ml)	Colour	Pk	Cat. No.
250	Clear	200	331-0094
500	Clear	100	331-0095
1000	Clear	60	331-0096
1000	Green	60	331-0099
2000	Clear	20	331-0098





#### Bottles, wide mouth, with screw cap



For basic sample collecting. Non sterile, lightweight, round or square.

- 34 mm neck for all bottles
- Tamper evident screw caps
- Manufactured by food grade PET

Capacity (ml)	Туре	Cap colour	Form	Pk	Cat. No.
250	Tamper evident screw cap	Blue	Square	200	331-0161
500	Tamper evident screw cap	Blue	Square	100	331-0155
1000	Tamper evident screw cap	Blue	Square	70	331-0167
250	Tamper evident screw cap	Orange	Round	200	331-0165
500	Tamper evident screw cap	Orange	Round	100	331-0166



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#### Bags, twist-seal



#### LDPE bags, manufactured and packaged in sterile conditions

Universal use, for samples such as foods, liquids, grains, petroleum products, animal material, waste and soil samples. Suitable for environmental sampling (surface samples), carcass sampling, biomedical and pharmaceutical research, quality assurance procedures (QA/QC), food industry applications and clinical and veterinary medicine.

- Provide a secure, contaminant-free, flexible container that ensures dependable analytical results
- RNase-, DNase-, pyrogen- and BPA-free
- Offer an economical and efficient way to collect, contain and carry samples
- Wire tab keeps bag open for filling
- Unique double fold over system provides a temporary leakproof seal

The opaque VWR® bag is used in the food, pharmaceutical and environmental industries. The black resin is a total light barrier that protects photosensitive substances, such as vitamins, chemicals and pharmaceuticals, or food supplements, plant extracts and biological tissues.

Capacity (ml)	Thickness (μm)	Dimensions (mm)	Pk	Cat. No.
Closure with 2 round wires, wit	thout write-on panel			
60	63	76×127	500	129-9831
130	63	76×178	500	129-9832
355	76	114×190	500	129-9833
450	63	114×229	500	129-9834
650	76	140×229	500	129-9837
900	63	114×305	500	129-9835
1200	63	114×382	500	129-9836
1500	76	140×382	500	129-9838
1650	76	178×305	250	129-9839
Closure with 2 round wires, with	th write-on panel			
60	63	76×127	500	129-9842
150	63	76×178	500	129-9843
450	63	114×229	500	129-9844
650	76	140×229	500	129-9846
900	63	114×305	500	129-9845
1650	76	178×305	250	129-9847
Closure with 1 round and 1 flat	•			
150	63	76×178	500	129-9850
450	63	114×229	500	129-9851
650	76	140×229	500	129-9854
900	63	114×305	500	129-9852
1200	63	114×382	500	129-9853
1500	76	140×382	500	129-9855
1650	76	178×305	250	129-9856
Closure with 1 round and 1 flat	t wire, with write-on panel			
150	63	76×178	500	129-9859
450	63	114×229	500	129-9860
650	76	140×229	500	129-9862
900	63	114×305	500	129-9861
1650	76	178×305	250	129-9863
Jumbo type, strong, with 2 flat	wires, without write-on panel			
3000	101	305×305	250	129-9876
4250	101	305×356	250	129-9877
5500	101	305×406	250	129-9878
6750	101	305×457	250	129-9879
8000	101	305×508	250	129-9880
10500	101	305×610	250	129-9881
13000	101	305×711	250	129-9882
15000	101	382×610	250	129-9883
Opaque bag: Closure with 2 ro	und wires, with write-on panel			
450	63	114×229	500	129-9870
	2 round wires, with write-on panel			
150	63	76×178	500	129-9884
450	63	114×229	500	129-9885
650	76	140×229	500	129-9886
1650	76	178×305	250	129-9887
	2 round wires, with write-on panel, sterile versi			
810	76	114×305	1.000	129-9889
Safety Tabs bags: Closure with	1 round and 1 flat wire, without write-on panel			
Safety Tabs bags: Closure with 1080	1 round and 1 flat wire, without write-on panel 76	104×305	500	129-0417
	76 76	104×305 178×305	250	129-0417 129-0418
1080	76			

WW Enable Science

Capacity (ml)	Thickness (μm)	Dimensions (mm)	Pk	Cat. No.	
Safety Tabs bags: Closure with 1 round and 1 flat wire, without write-on panel, sterile version double bag					
1650	101	178×305	1.000	129-9890	
Safety Tabs bags: Closure with 1 round and 1 flat wire, with write-on panel					
450	63	114×229	500	129-9888	
650	76	140×229	1.000	300-0106	
1650	76	178×305	1.000	300-0107	
2250	101	254×305	250	129-0012	
4000	101	254×382	250	129-0013	



### Bags, zip seal



#### LDPE

For storage and transport of solid samples, tubes, spare parts and documents, available with and without write-on

- Quick sealing with guide tracks on the pressure seal
  Transparent PE for easy identification of the contents
  Can be resealed repeatedly, flexible and tear-proof

60×40       1.000       129-0293         80×60       1.000       129-0294         100×70       1.000       129-0295         150×100       1.000       129-0295         150×100       1.000       129-0297         220×160       1.000       129-0298         250×180       1.000       129-0306         300×200       1.000       129-0306         350×250       1.000       129-0306         350×250       1.000       129-0307         400×300       1.000       129-0308         550x150       1.000       129-0310         400×300       1.000       129-0310         50x250       1.000       129-0310         50x80       1.000       129-0310         50x80       1.000       129-0311         70x100       1.000       129-0312         80x120       1.000       129-0312         100x150       1.000       129-0318         160x220       1.000       129-0318         180x250       1.000       129-0318         200x300       1.000       129-0318         200x300       1.000       129-0318         200x300       1.0	LxW (mm)	Pk	Cat. No.
80x60       1.000       129-0298         100x70       1.000       129-0295         150x100       1.000       129-0295         150x100       1.000       129-0296         170x120       1.000       129-0298         250x180       1.000       129-0308         300x200       1.000       129-0308         350x250       1.000       129-0308         300x200       1.000       129-0308         350x250       1.000       129-0310         300x300       1.000       129-0310         50x850       1.000       129-0310         60x80       1.000       129-0310         70x100       1.000       129-0310         70x100       1.000       129-0310         70x100       1.000       129-0312         100x150       1.000       129-0318         100x20       1.000       129-0318         180x250       1.000       129-0316         200x300       1.000       129-0316         200x300       1.000       129-0316         300x400       1.000       129-0318         200x300       1.000       129-0318         200x300       1	Single pocket without write-on panel		
100x70       1.000       129-0396         120x80       1.000       129-0295         150x100       1.000       129-0296         170x120       1.000       129-0298         250x180       1.000       129-0298         300x200       1.000       129-0398         350x250       1.000       129-0398         300x200       1.000       129-0308         350x250       1.000       129-0310         40x60       1.000       129-0311         50x880       1.000       129-0311         50x810       1.000       129-0311         50x80       1.000       129-0312         80x120       1.000       129-0312         100x150       1.000       129-0312         100x150       1.000       129-0318         100x170       1.000       129-0318         180x250       1.000       129-0318         200x300       1.000       129-0318         300x400       1.000       129-0318         200x300       1.000       129-0318         300x400       1.000       129-0318         200x300       1.000       129-0318         200x300	60×40	1.000	129-0293
120×80       1,000       129-0295         150×100       1,000       129-0296         170×120       1,000       129-0297         220×160       1,000       129-0299         300×200       1,000       129-0306         400×300       1,000       129-0308         400×300       1,000       129-0308         400×80       1,00       129-0318         400×80       1,00       129-0318         60×80       1,00       129-0310         60×80       1,00       129-0311         70×100       1,00       129-0312         80×120       1,00       129-0312         100×150       1,00       129-0312         100×150       1,00       129-0312         100×250       1,00       129-0318         180×250       1,00       129-0318         350×250       1,00       129-0318         300×400       1,00       129-0318         300×400       1,00       129-0318         300×400       1,00       129-0318         300×40       1,00       129-0318         300×40       1,00       129-0318         300×40       1,00 <td< td=""><td>80×60</td><td>1.000</td><td>129-0294</td></td<>	80×60	1.000	129-0294
150×100       1.000       129-0296         170×120       1.000       129-0297         250×180       1.000       129-0298         350×250       1.000       129-0306         350×250       1.000       129-0308         400×300       1.000       129-0308         550gle pocket with writing area       1.000       129-0310         60×80       1.000       129-0311         70×100       1.000       129-0311         70×100       1.000       129-0312         70×100       1.000       129-0312         70×100       1.000       129-0312         70×100       1.000       129-0312         70×100       1.000       129-0312         70×100       1.000       129-0312         70×100       1.000       129-0312         70×100       1.000       129-0312         70×100       1.000       129-0314         70×100       1.000       129-0314         70×100       1.000       129-0314         70×100       1.000       129-0314         70×100       1.000       129-0314         70×100       1.000       129-0314         70×100<	100×70	1.000	129-0309
170×120       1.000       129-0298         120×160       1.000       129-0298         150×180       1.000       129-0306         350×250       1.000       129-0306         350×250       1.000       129-0308         400×300       1.000       129-0308         55mgle pocket with writing area       1.000       129-0310         60×80       1.000       129-0311         70×100       1.000       129-0312         80×120       1.000       129-0312         100×150       1.000       129-0313         120×170       1.000       129-0314         160×220       1.000       129-0315         180×250       1.000       129-0316         200×300       1.000       129-0316         200×300       1.000       129-0318         300×250       1.000       129-0318         300×250       1.000       129-0318         300×250       1.000       129-0318         300×250       1.000       129-0318         300×250       1.000       129-0318         300×250       1.000       129-0318         300×250       1.000       129-0318	120×80	1.000	129-0295
220×160       1.000       129-0298         250×180       1.000       129-0309         300×200       1.000       129-0306         350×250       1.000       129-0308         400×300       1.000       129-0318         5ingle pocket with writing area       1.000       129-0311         60×80       1.000       129-0311         70×100       1.000       129-0312         80×120       1.000       129-0312         100×150       1.000       129-0313         160×220       1.000       129-0314         160×220       1.000       129-0316         200×300       1.000       129-0316         300×250       1.000       129-0316         300×250       1.000       129-0316         300×200       1.000       129-0316         300×200       1.000       129-0318         300×200       1.000       129-0318         300×200       1.000       129-0318         300×200       1.000       129-0318         200×300       1.000       129-0318         300×200       1.000       129-0318         200×300       1.000       129-0318	150×100	1.000	129-0296
250×180       1.000       129-0398         300×200       1.000       129-0308         350×250       1.000       129-0308         400×300       1.000       129-0318         50xelpe pocket with writing area       1.000       129-0310         60×80       1.000       129-0311         70×100       1.000       129-0312         80×120       1.000       129-0312         100×150       1.000       129-0313         120×170       1.000       129-0314         160×220       1.000       129-0318         80x55       1.000       129-0318         300×400       1.000       129-0318         300×400       1.000       129-0318         300×400       1.000       129-0318         300×400       1.000       129-0318         50x250       1.00       129-0318         20x300       1.00       129-0318         50x250       1.00       129-0318         20x300       1.00       129-0318         20x300       1.00       129-0318         50x20       1.00       129-0318         20x300       1.00       129-0318         20x300 <td>170×120</td> <td>1.000</td> <td>129-0297</td>	170×120	1.000	129-0297
300×200       1,000       129-0306         350×250       1,000       129-0307         400×300       1,000       129-0318         80×80       1,000       129-0310         60×80       1,000       129-0312         70×100       1,000       129-0312         100×150       1,000       129-0312         1100×150       1,000       129-0314         160×220       1,000       129-0314         160×220       1,000       129-0316         200×300       1,000       129-0316         350×250       1,000       129-0316         350×250       1,000       129-0316         350×250       1,000       129-0319         500x400       1,000       129-0319         500x90       1,000       129-0319         500x90       1,000       129-0325         500x90       1,000       129-0325         500x100       1,000       129-0325         500x100 <t< td=""><td>220×160</td><td>1.000</td><td>129-0298</td></t<>	220×160	1.000	129-0298
350x250       1.000       129-0308         400x300       1.000       129-0308         5ingle pocket with writing area	250×180	1.000	129-0299
400x300       1.000       129-0308         Single pocket with writing area       1.000       129-0310         60x80       1.000       129-0312         70x100       1.000       129-0312         80x120       1.000       129-0313         100x150       1.000       129-0313         120x170       1.000       129-0314         160x220       1.000       129-0315         180x250       1.000       129-0316         200x300       1.000       129-0318         300x400       1.000       129-0318         Single pocket, sterile with write-on panel       1.000       129-0318         100x170       129-0318       1.000       129-0318         100x170       129-0	300×200	1.000	129-0306
Single pocket with writing area       40×60       1.000       129-0310         60×80       1.000       129-0312         70×100       1.000       129-0312         80×120       1.000       129-0312         100×150       1.000       129-0313         120×170       1.000       129-0314         160×220       1.000       129-0315         180×250       1.000       129-0316         200×300       1.000       129-0317         350×250       1.000       129-0318         300×400       1.000       129-0318         200×300       1.000       129-0318         200×300       1.000       129-0318         300×400       1.000       129-0318         200×300       1.000       129-0318         200×300       1.000       129-0318         200×300       1.000       129-0318         200×300       1.000       129-0318         200×300       1.000       129-0318         200×300       1.000       129-0318         200×300       1.000       129-0318         200×300       1.000       129-0318         200×300       1.000       129-0318	350×250	1.000	129-0307
40×60       1.000       129-0310         60×80       1.000       129-0312         70×100       1.000       129-0312         80×120       1.000       129-0312         100×150       1.000       129-0313         160×220       1.000       129-0314         160×220       1.000       129-0316         200×300       1.000       129-0317         350×250       1.000       129-0318         300×400       1.000       129-0318         500×300       1.000       129-0319         500x300       1.000       129-0318         300×300       1.000       129-0318         500x300       1.000       129-0325         500x300       <	400×300	1.000	129-0308
60×80       1.000       129-0311         70×100       1.000       129-0312         80×120       1.000       129-0312         100×150       1.000       129-0313         120×170       1.000       129-0314         160×220       1.000       129-0315         180×250       1.000       129-0316         200×300       1.000       129-0317         350×250       1.000       129-0318         350×250       1.000       129-0318         350×250       1.000       129-0318         350×250       1.000       129-0318         350×250       1.000       129-0318         350×250       1.000       129-0318         200×300       1.000       129-0318         350×250       1.000       129-0318         200×300       1.000       129-0318         350×250       1.000       129-0325         200×300       1.000       129-0325         200×300       1.000       129-0318         350×250       1.000       129-0325         200×300       1.000       129-0325         200×300       1.000       129-0325         200×300	Single pocket with writing area		
70×100       1.000       129-0320         80×120       1.000       129-0312         100×150       1.000       129-0313         120×170       1.000       129-0314         160×220       1.000       129-0315         180×250       1.000       129-0316         200×300       1.000       129-0317         350×250       1.000       129-0318         300×400       1.000       129-0318         Single pocket, sterile with write-on panel         200×300       1.000       129-0325         Double pocket without write-on panel         120×170       1.000       129-0321         160×220       1.000       129-0322         180×250       1.000       129-0323	40×60	1.000	129-0310
80×120       1.000       129-0312         100×150       1.000       129-0313         120×170       1.000       129-0314         160×220       1.000       129-0315         180×250       1.000       129-0316         200×300       1.000       129-0317         350×250       1.000       129-0318         300×400       1.000       129-0318         Single pocket, sterile with write-on panel         200×300       1.000       129-0325         Double pocket without write-on panel         120×170       1.000       129-0321         160×220       1.000       129-0322         180×250       1.000       129-0323	60×80	1.000	129-0311
100×150       1.000       129-0313         120×170       1.000       129-0315         160×220       1.000       129-0315         180×250       1.000       129-0316         200×300       1.000       129-0317         350×250       1.000       129-0318         300×400       1.000       129-0318         Single pocket, sterile with write-on panel         200×300       1.000       129-0325         Double pocket without write-on panel         120×170       1.000       129-0321         160×220       1.000       129-0322         180×250       1.000       129-0323	70×100	1.000	129-0320
120×170       1.000       129-0314         160×220       1.000       129-0315         180×250       1.000       129-0316         200×300       1.000       129-0317         350×250       1.000       129-0318         300×400       1.000       129-0318         Single pocket, sterile with write-on panel       1.000       129-0325         200×300       1.000       129-0325         Double pocket without write-on panel       1.000       129-0325         120×170       1.000       129-0321         160×220       1.000       129-0322         180×250       1.000       129-0323	80×120	1.000	129-0312
160×220       1.000       129-0315         180×250       1.000       129-0316         200×300       1.000       129-0317         350×250       1.000       129-0318         300×400       1.000       129-0319         Single pocket, sterile with write-on panel         200×300       1.000       129-0325         Double pocket without write-on panel         120×170       1.000       129-0321         160×220       1.000       129-0322         180×250       1.000       129-0323	100×150	1.000	129-0313
180×250       1.000       129-0316         200×300       1.000       129-0317         350×250       1.000       129-0318         300×400       1.000       129-0319         Single pocket, sterile with write-on panel         200×300       1.000       129-0325         Double pocket without write-on panel         120×170       1.000       129-0321         160×220       1.000       129-0322         180×250       1.000       129-0323	120×170	1.000	129-0314
200×300       1.000       129-0317         350×250       1.000       129-0318         300×400       1.000       129-0319         Single pocket, sterile with write-on panel         200×300       1.000       129-0325         Double pocket without write-on panel         120×170       1.000       129-0321         160×220       1.000       129-0322         180×250       1.000       129-0323	160×220	1.000	129-0315
350×250       1.000       129-0318         300×400       1.000       129-0319         Single pocket, sterile with write-on panel         200×300       1.000       129-0325         Double pocket without write-on panel         120×170       1.000       129-0321         160×220       1.000       129-0322         180×250       1.000       129-0323	180×250		
300×400     1.000     129-0319       Single pocket, sterile with write-on panel     1.000     129-0325       Double pocket without write-on panel     1.000     129-0321       120×170     1.000     129-0321       160×220     1.000     129-0322       180×250     1.000     129-0323	200×300		
Single pocket, sterile with write-on panel     1.000     129-0325       200×300     1.000     129-0325       Double pocket without write-on panel     1.000     129-0321       120×170     1.000     129-0321       160×220     1.000     129-0322       180×250     1.000     129-0323	350×250		
200×300     1.000     129-0325       Double pocket without write-on panel     120×170     1.000     129-0321       160×220     1.000     129-0322       180×250     1.000     129-0323	300×400	1.000	129-0319
Double pocket without write-on panel       120×170     1.000     129-0321       160×220     1.000     129-0322       180×250     1.000     129-0323	Single pocket, sterile with write-on panel		
120×170     1.000     129-0321       160×220     1.000     129-0322       180×250     1.000     129-0323	200×300	1.000	129-0325
160×220     1.000     129-0322       180×250     1.000     129-0323	Double pocket without write-on panel		
180×250 1.000 <b>129-0323</b>	120×170		
	160×220	1.000	
200×300 1.000 <b>129-0324</b>	180×250		
	200×300	1.000	129-0324

#### Bags, zip seal



Resealable zip seal bag.

- Can be resealed repeatedly, flexible and tear-proof Transparent material means contents are clearly visible
- Simple sealing with guide tracks on the pressure seal

Description	Dimensions (mm)	Pk	Cat. No.
Zip seal bag	220×310	100	129-9154

Bags, zip seal, Nalgene® Thermo Scientific



#### LDPE, 101 μm

Ideal for small lab items, botanical samples and other specimens. Not recommended for storing liquids.

- Strong, transparent and waterproof
- Heavy-duty zipper seals contents

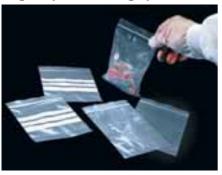
Thickness (µm)	L×W (mm)	Pk	Cat. No.
101	102×152	50	216-8121
101	203×127	50	216-8122
101	330×152	50	216-8123
101	330×229	50	216-8124
101	457×229	50	216-8125

#### Bags, zip seal, with kangaroo pocket



• Additional pocket (170 mm) for documents

Bags, zip seal, Minigrip®



Zip seal transparent polyethylene bags. Plain or with 'write-on' panels.

Description	L×W (mm)	Pk	Cat. No.
Minigrip® style PE bags (plain)	56×56	500	129-0358
Minigrip® style PE bags (plain)	110×137	500	129-0359
Minigrip® style PE bags (plain)	150×225	500	129-0360
Minigrip® style PE bags (plain)	250×350	500	129-0361
Minigrip® style PE bags (plain)	375×500	500	129-0362
Minigrip® style PE bags (with write-on panel)	56×56	500	129-0363
Minigrip® style PE bags (with write-on panel)	100×137	500	129-0364
Minigrip® style PE bags (with write-on panel)	125×187	500	129-0365
Minigrip® style PE bags (with write-on panel)	150×225	500	129-0366

### Storage bags, zip seal



Self-seal with write-on panel, 200 gauge.

- Resealable
- 100% recyclable

Description	Dimensions (mm)	Pk	Cat. No.
Clear zip seal bags, BW120	57×57	100	300-0177
Clear zip seal bags, BW122	75×85	100	300-0178
Clear zip seal bags, BW123	89×114	100	300-0179
Clear zip seal bags, BW126	140×140	100	300-0180
Clear zip seal bags, BW128	125×190	100	300-0181
Clear zip seal bags, BW129	190×190	100	300-0182
Clear zip seal bags, BW130	152×229	100	390-0531
Clear zip seal bags, BW131	205×280	100	300-0183
Clear zip seal bags, BW132	225×320	100	300-0184

### **Storage bags**



#### Clear PE, plain

Heavy duty storage bags, 500 gauge. Suitable for heat sealing.

Description	Dimensions (mm)	Pk	Cat. No.
Heat seal storage bags	150×200	100	300-0045
Heat seal storage bags	255×355	50	300-0046
Heat seal storage bags	355×510	50	300-0047
Heat seal storage bags	455×760	50	300-0048

### Specimen bags, zip seal, biohazard



Specimen bags with front compartment for specimen and back pocket for report.

- Zip seal across upper section Plain for own labelling or printed with biohazard symbol

Description	L×W (mm)	Pk	Cat. No.
Printed zip seal specimen bags	150×140	1.000	300-0116
Plain zip seal specimen bags	150×140	500	129-0412



# SELECTED FOR YOU

#### Swabs, cotton head, Critical Swab



- Highly absorbent
- Low-linting formulations reduce contamination
- Economical

Model	149-0331	149-0332	149-0340	149-0341	149-0342
Handle length (mm)	15	2,0	82,0	78,0	75,5
Handle width (mm)		2,5			1,5
Head length (mm)	15,9	17,4	11,0	15,0	14,0
Head width (mm)	4,8	5,9	4,7	4,4	3,2
Total length (mm)	168,0	170,0	93,0		89,5

Description	Pk	Cat. No.
Absorbent cotton tip and wooden shaft, autoclavable	1.000	149-0331
Large absorbent cotton tip and wooden shaft, autoclavable	500	149-0332
Double cone-shaped, highly absorbent cotton heads, packaged in an anti-static leaf pack, white	1.250	149-0340
Double, highly absorbent cotton heads, packaged in an anti-static leaf pack, white	2.500	149-0341
Double slim highly absorbent cotton heads, packaged in an anti-static leaf pack, white	2.500	149-0342





#### Swabs, foam head, Critical Swab



The VWR Critical Swab line includes foam head swabs, cotton head swabs, and foam-over-cotton head swabs, suitable for a wide variety of applications. Swabs feature 100 ppi open or closed cell polyurethane foam with 100% virgin polypropylene handle. Swab heads are thermally bonded to the handle without using adhesive. Some have a blue glass fibre reinforced polypropylene shaft for extra rigidity, especially for use in critical environments.

- Ideal for use in controlled environments
- Withstand most widely used solvents
- Non abrasive to protect delicate components

Model	Handle length (mm)	Handle width (mm)	Head length (mm)	Head width (mm)	Total length (mm)
149-0264	106,0	6,6	25,0	15,0	131,0
149-0265	93,0	4.2	12,0	4,8	105,0
149-0266	93,0	4,3	21,0	7,0	114,0
149-0267	146,0	3,2	17,0	6,2	163,0
149-0268	57,5	2,4	10,5	3,4	68,0
149-0269	59,0	2.0	12,0	3,6	71,0
149-0270	79,0	3,0	10,0	3,5	89,0
149-0271	50,0	2,5	20.0	3,4	70,0
149-0272	59,7	2,2	20,0	3,2	79,7
149-0333	153.0	2,5	17,4	4.0	170,0
149-0334	152,0	3,1	15,1	4,8	167,0
149-0337	64,0	2.5	17,5	3,9	81,5
149-0338	82,8	2,5	25.4	3,6	108,0
149-0339	130,0	5,0	25,4	13,5	152,0
149-0343	161,0	2,4	14,6	1,8	173,0

Description	Pk	Cat. No.
Cone-shaped reticulated foam head with a blue glass fibre reinforced polypropylene shaft	500	149-0337
Extended-length reticulated foam head, handle end pointed for dual use, with a blue glass fibre reinforced polypropylene shaft	500	149-0338
Fine-point reticulated foam head with a blue glass fibre reinforced polypropylene shaft	500	149-0343

Continued on next page



Description	Pk	Cat. No.
Foam head with a wooden shaft	500	149-0333
Large flexible foam head (closed)	100	149-0266
Large rectangular foam head	500	149-0339
Large rectangular foam head (closed)	100	149-0264
Medium flexible foam head with a nylon handle (closed)	100	149-0265
Medium foam head (open)	500	149-0267
Medium pointed compressed foam head (open)	500	149-0271
Micro foam head (open)	500	149-0272
Mini pointed compressed foam head (open)	500	149-0270
Paddle-shaped foam head	500	149-0334
Small foam head (open)	500	149-0269
Small foam head with flexible tip (open)	500	149-0268



#### Swabs, plain



Available with a range of tip, shaft and packaging options.

• Suitable for all requirements

Description	Pk	Cat. No.
Plain swab, ENT, straight wire, labelled tube	100	720-0133
Plain swab, pernasal, twisted wire	100	720-0137
Plain swab, plastic stick, labelled tube	100	720-0124
Plain swab, plastic stick, peel pouch	1.250	720-0129
Plain swab, wood stick, bulk, non sterile for autoclaving	5.000	720-0131
Plain swab, wood stick, bulk, sterile	5.000	720-0132
Plain swab, wood stick, peel pouch	800	720-2203
Plain swab, wood stick, peel pouch	1.250	720-0127
Plain swab, wood stick, peel pouch, 5/pouch	500	720-0128
Plain swab with fine tip, plastic stick, labelled tube	100	720-0122
Plain swab with fine tip, plastic stick, peel pouch	125	720-0130

#### Swabs, plain



Plain swabs for a wide range of applications.

- Wooden shaft
- Cotton tips

Model	115-0500	115-0501	115-0502	115-0503	115-0504
Handle length (mm)		150,0		200,0	80,0
Handle width (mm)	2,2	2	,5	3,0	2,2
Head width (mm)	5,5	8	,0	11,0	6,0

Description	Pk	Cat. No.
Swab, wooden shaft with cotton tip	100	115-0500
Swab, wooden shaft with cotton tip	100	115-0501
Swab, wooden shaft with cotton tip	50	115-0502
Swab, wooden shaft with cotton tip	50	115-0503
Swab, wooden shaft with two cotton tips	100	115-0504



#### **Swabs**



#### Simple swabs in tubes

Manufactured from high quality polypropylene, suitable for medical use guarantees that all swab tubes are non toxic and have low moisture permeability.

- Sterile
- Each tube has a tamper-proof cap
- The batch number, expiry date and the full description are printed on each tube

#### Simple swabs in peel packs

- Individually sterile packed
- Available in various combinations

Description	Pk	Cat. No.
Simple Swabs in Tubes		
Wood/cotton	100	710-0181
Wood/cotton, charcoal	100	710-0456
Plastic/viscose	100	710-0457
Plastic/alginate	100	710-0429
Plastic/polyester	1.000	710-0928
Aluminium/viscose	100	710-0430
Aluminium/polyester	1.000	710-0929
Wood/carded cotton	100	710-0458
Twisted aluminium/viscose	100	710-0461
Simple Swabs in Peel Packs		
Plastic/polyester	1.000	710-0459
Wood/cotton	1.000	710-0185
Plastic/viscose	1.000	710-0186
Plastic/viscose, 2 per peel pouch	1.000	710-0460
Aluminium/viscose	1.000	710-0187
Aluminium/polyester	1.000	710-0931
Plastic minitip/viscose	100	710-0463
Plastic minitip/polyester	100	710-0464



#### Swabs, plain Thermo Scientific



High quality medical grade polypropylene ensures all swab tubes are non toxic and have a low moisture permeability. Every swab has a tamper evident seal and is printed with lot number, expiry date and full description.

Supplied sterile

Description	Pk	Cat. No.
Plain swab, wood shaft, bulk	2.500	720-0025
Plain swah twisted wire shaft	100	720-0063





#### **Transport swabs**



A range of collection and transport devices for bacterial specimens. Available with different applicators and transport media. Shipment in aluminium packaging under nitrogen ensures longer shelf life.

- A wide range of bacteria can survive for 24 to 48 hours on the applicator and in the tube
- Proven in many studies with aerobic and anaerobic organisms
- Each swab system is individually wrapped in a pouch with a tamper-proof seal, which turns white when opened

Medium risk for transient or short-term use:

Class IIa - surgical-invasive, short-term application, for taking samples from natural orifices and surgical wounds.

Description	Pk	Cat. No.
Swab, shaft/head, transport medium, plastic/viscose, Amies gel	50	710-0432
Swab, shaft/head, transport medium, plastic/viscose, Amies gel with charcoal	50	710-0434
Swab, shaft/head, liquid transport medium, plastic/viscose, Amies liquid. Contains a fluid filled sponge. The sponge holds 1 ml of transport medium and ensures that the swab tip remains in contact with the liquid medium during transport.	50	710-0438
Swab, shaft/head, transport medium, plastic/viscose, Stuart liquid. Contains a fluid filled sponge. The sponge holds 1 ml of transport medium and ensures that the swab tip remains in contact with the liquid medium during transport.	50	710-0441
Swab, shaft/head, transport medium, aluminium/viscose, Amies gel	50	710-0433
Swab, shaft/head, transport medium, aluminium/viscose, Amies gel with charcoal	50	710-0435
Swab, shaft/head, transport medium, twisted aluminium/viscose, Amies gel	50	710-0436
Swab, shaft/head, transport medium, twisted aluminium/viscose, Amies gel with charcoal	50	710-0437
Swab, shaft/head, transport medium, aluminium/viscose, Amies liquid. Regular firm aluminum wire - orange cap ideal for male urethral sampling.	50	710-0439
Swab, shaft/head, transport medium, twisted aluminium/viscose, Amies liquid. Flexible twisted wire - blue cap specifically for nasopharyngeal sampling. Shaped wire tip covered with soft rayon.	50	710-0440







#### Transport swab, Transystem M40



Transport swab system plastic shaft, synthetic tip, with Amies agar gel. Helps to improve recovery and survival of fastidious microorganisms from the throat, vagina, wounds and skin swabs.

- Compliant with CLSI (formerly NCCLS) standard M40-A at 21 and 4 °C
- Without charcoal

Description	Pk	Cat. No.
M40 swab, Amies	50	710-0442



#### **Transport swabs**



A range of collection and transport devices for bacterial specimens. Class IIa surgical type device for temporary, single use. For collecting samples from the natural orifices of the body and wounds. Available with a range of different applicators and transport media.

- Tip and tube ensure viability of a wide range of bacteria for 24 to 48 hours
- Performance tested for a wide range of aerobic and anaerobic organisms
- Each swab is packaged individually in a bag with a tamper-proof closure which turns white after opening
- Sterile

Description	Pk	Cat. No.
Swabs with transport medium, wood/cotton tipped, Amies gel	50	710-0424
Swabs with transport medium, wood/cotton tipped, Stuart gel	50	710-0444
Swabs with transport medium, wood/cotton tipped, Amies gel with charcoal	50	710-0425
Swabs with transport medium, wood/cotton tipped, Stuart gel with charcoal	50	710-0426
Swabs with transport medium, plastic/viscose, Stuart gel	50	710-0443
Swabs with transport medium, plastic/viscose, Stuart gel with charcoal	50	710-0446
Swabs with transport medium, plastic, Cary-Blair gel	50	710-0449
Swabs with transport medium, double, plastic, Amies gel	50	710-0924
Swabs with transport medium, double, plastic, Amies gel with charcoal	50	710-0925
Swabs with transport medium, double, plastic, Stuart liquid	500	710-0926
Swabs with transport medium, aluminium/viscose, Stuart gel	50	710-0445
Swabs with transport medium, aluminium/viscose, Amies gel with charcoal	50	710-0923
Swabs with transport medium, aluminium, Stuart liquid	500	710-0927

IVD

#### Transport swabs, Transwab®



Each transport tube contains semi-solid Amies medium (with or without charcoal), which is preferred for most specimens because the inorganic buffer ensures maintenance without overgrowth.

- Excellent recovery of both aerobic and anaerobic bacteria
- Open weave, non toxic, rayon bud allows good sample collection and high release of micro-organisms onto plates or into broth
- Safety cap includes double seal, inside and outside tube, protecting both user and specimen
- Colour coded caps for ease of selection according to specimen type

Conforming to MDD, IVD, and compliant with CLSI M40

**Delivery information:** Each Transwab® unit consists of a sterile, easy peel pack containing either a single plastic or wire shaft with colour coded cap and pre-labelled transport tube.

Description	Pk	Cat. No.
Transport swab, single plastic shaft, Amies medium	125	720-0138
Transport swab, single plastic shaft, Amies medium with charcoal	125	720-0139
Transport swab, straight aluminium wire shaft, Amies medium	125	720-0140
Transport swab, ultrafine twisted wire shaft, Amies medium	125	720-2202

#### Transport swabs, liquid medium for virus and chlamydia



Liquid transport medium is contained in a sponge carrier located in the bottom of the tube. Simply insert swab into the tube after collecting sample. The swab tip is placed in direct contact with the medium soaked sponge.

- Very easy to use
- Special colours of caps (virus-pink; chlamydia-yellow) make differentiation easy

Description	Pk	Cat. No.
Swabs with transport medium, for chlamydia, plastic	25	710-0450
Swabs with transport medium, for chlamydia, aluminium	25	710-0451
Swabs with transport medium, for chlamydia, twisted aluminium	25	710-0452
Swabs with transport medium, for virus, plastic	25	710-0453
Swabs with transport medium, for virus, aluminium	25	710-0454
Swahs with transport medium, for virus, twisted aluminium	25	710-0455



#### Transport swabs, Sterilin® Thermo Scientific



#### Plastic shaft, blue cap, rayon tip

Primarily intended for sample collection and transport of bacteria, these swabs contain media for the maintenance of bacteria during transport to the laboratory. The pouch seal turns white on opening, a visible sign of tamper evidence. Each batch of product is tested for performance using a wide range of aerobic and anaerobic organisms to ensure adequate recovery, together with sterility and other quality assurance tests.

- Maintains a wide range of bacteria viable for 24 to 48 hours
- Unique nitrogen flushed aluminium inner bag with laminated film pouch prevent oxidation and dehydration of media
- Each tube is printed with lot number/expiry date and has a tamper evident sleeve, ensuring complete traceability and sterility

CE marked as Class IIa in accordance with Medical Device Directive 93/42/EEC (for transient invasive use)

Description	Pk	Cat. No.
Transport swab, Amies	500	720-0026
Transport swab, Amies with charcoal	500	720-0027



#### Square sampling templates



Sampling templates to define sampling area. For flat surfaces, templates help define the sample size and allows the investigator to determine the number of organisms per cm<sup>2</sup>. This can be used to validate microbial bioburden in clean rooms and critical areas in which sterile drugs are exposed to the environment and in food processing plants to establish hygiene scores based on colony forming units per cm<sup>2</sup>. Two sizes of sampling templates are available: 4×5 cm (20 cm<sup>2</sup>) and 10×10 cm (100 cm<sup>2</sup>).

- For a defined and standardised sampling
- Two sizes

Packaging: Sampling templates in sterile packs, 50 templates/box

Description	Pk	Cat. No.
Template, 4×5 cm, sterile pack containing one template	50	710-0483
Template, 4×5 cm, sterile pack containing five templates	50	710-0482
Template, 10×10 cm, sterile pack containing one template	50	710-0481
Template, 10×10 cm, sterile pack containing five templates	50	710-0480









#### Digital incubators, INCU-Line®, IL 10 and IL 23



The IL 10 and IL 23 digital incubators offer an economical and space saving solution for microbiology or haematology applications. The temperature can be freely adjusted in increments of 0,1 °C up to a maximum of 70 °C. Heating elements are incorporated into the housing base and walls to ensure temperature stability and uniformity. The IL 10 is available with a transparent plexiglas® window to provide full visibility or a painted, opaque plexiglas® window to protect photosensitive samples. The housing and door frame are constructed entirely of epoxy coated mild steel.

- Compact design (footprint is only 0,08 m², IL 10 model)
- Digital PID control with PT100 sensor and LED display, temperature control can be readjusted with a certified reference temperature measuring instrument
- Excellent temperature stability
- Easy to use, safe and reliable

**Delivery information:** IL 10 is supplied with one perforated stainless steel shelf, IL 23 is supplied with two. The IL 10 can, optionally, be loaded with up to two specially designed aluminium tube racks for vertical incubation of a maximum of 24 dip slide tubes.

Model	IL 10	IL 23	
Temperature range (°C)	Ambient +570		
Temperature fluctuation (time) (°C)	±0,5 at 37 °C		
Temperature variation (spatial) (°C)			
Capacity (I)	10	23	
Convection type	Natural convection		
Shelves supplied (max.)	1 (2) 2 (3)		
Internal W×D×H (mm)	230×220×200	290×290×270	
External W×D×H (mm)	285×280×335	340×360×400	
Nominal power consumption (W)	70	160	
Weight (kg)	8,3	12,8	

Type	Pk	Cat. No.
IL 10 mini incubator, transparent window	1	390-0384
IL 10 mini incubator, painted opaque window	1	390-0385
IL 23 incubator, transparent window	1	390-0482

Description	Pk	Cat. No.
Accessories		
Tube rack for dip slides, 2×6 positions, Ø 32 mm	1	390-0386
Extra shelf for IL 10, stainless steel, 226×215 mm	1	390-0387
Extra shelf for IL 23, stainless steel, 286×285 mm	1	390-0483







#### Incubators, INCU-Line®, IL 53 and IL 115



Incubators with natural air circulation for all standard incubation applications. Units have stainless steel chamber with glass inner doors.

- Microprocessor control with large digital temperature display
- Temperature setting in increments of 0,1 °C
- Built-in timer from 0 999 min, or 0 99,9 h or continuous mode
- Exhaust duct on the back of the unit with manually adjustable slide
- Independent adjustable temperature safety device Class 3.1 with a visual alarm, according to DIN 12880

**Delivery information:** Supplied with two chrome plated shelves.

Model	IL 53	IL 115	
Temperature range (°C)	Ambient +570		
Temperature fluctuation (time) (°C)	±0,2 at 37 °C		
Temperature variation (spatial) (°C)	±0,6 at 37 °C	±0,7 at 37 °C	
Capacity (I)	53	115	
Convection type	Natural convection		
Shelves supplied (max.)	2 (4)		
Internal W×D×H (mm)	401×330×401	600×400×480	
External W×D×H (mm)	620×622×680	820×732×760	
Nominal power consumption (W)	200	250	
Weight (kg)	45	68	

466-3523

Continued from previous page

Chrome plated shelf

Туре		Pk	Cat. No.
IL 53 incubator		1	390-0350
IL 115 incubator		1	390-0353
Description	For	Pk	Cat. No.
Shelves			
Chrome plated shelf	DL 53/VL 53/IL 53	1	466-3522

DL 115/VL 115/IL 115

#### Small incubators, B28 Binder



A compact device with hydraulic-mechanical control for precise, reliable incubation conditions. Optimum temperature range at 37 °C. Unit has galvanised sheet steel housing, powder coated throughout to afford maximum protection against corrosion, hydraulic-mechanical thermostat with analogue dial thermometer.

- Available with or without independent temperature safety regulator TC Class 1- in the event of all
  other controllers failing, mechanical temperature limiter Class 1 stops the heating at ~10 °C above the
  maximum temperature of the incubator, saves the incubator from overheating
- Robust and space saving
- Inner glass door

**Delivery information:** Supplied with two chrome-plated shelves.

Temperature range (°C)	Ambient +570
Temperature fluctuation (time) (°C)	±1 at 37 °C
Capacity (I)	28
Convection type	Natural convection
Shelves supplied (max.)	2 (4)
Internal W×D×H (mm)	400×250×280
External W×D×H (mm)	580×425×405
Power consumption (W)	253
Weight (kg)	23

Туре	Pk	Cat. No.
B 28, without temperature regulator TC Class 1	1	390-6032
B 28. with temperature regulator TC Class 1	1	390-6033

### Microbiological incubators, with or without forced convection, BD and BF series Binder





Two versions of these incubators with electronically controlled APT.line™ preheating chamber are available depending on the application: The BD series with natural convection for all standard applications and the BF series with forced convection for applications with high load density. The advantage of the BF series with forced convection is extremely precise temperature distribution within the incubator, even with high load density, and fast temperature recovery times after the door has been opened. APT.line™ incubators provide superior temperature accuracy and meet all quality requirements for uniform, reproducible incubation conditions. Their broad temperature range and high performance mean that the BD and BF series can be used for all incubation tasks in research, production and quality assurance. Units up to 115 litres can be stacked on top of each other to save space. The incubators are easy to clean with residue-free cleaning of entire inner chamber and inner glass door. All models have an independent adjustable temperature safety device Class 3.1 with a visual alarm, which saves the samples and the incubator, and adjustable ventilation by means of rear exhaust duct, Ø 50 mm with ventilation flap and front ventilation slide. Both BD and BF series have RS422 interface for communication software (software optional). On the BF series the interface is switchable to printer output with accessory RS232/RS422 interface converter.

- Additional safety is provided with disinfection at 100 °C and easy operation
- DS controller with integrated timer 0 to 99 hours (BD series), MS controller with several timer functions such as 'Delayed OFF' and 'Delayed ON' (BF series)
- High degree of temperature accuracy and fast temperature recovery time after the door has been opened (BF series)
- Adjustable fan speed (BF series)

**Delivery information:** Supplied with two chrome plated shelves and Binder test certificate. Calibrations and validations possible, for details please contact your local VWR sales office.

Model	Temperature range (°C)	Temperature fluctuation (time) (°C)	Temperature variation (spatial) (°C)	Capacity (I)	Convection type	Nominal power consumption (W)
Models with natural cor	vection					
BD 23		≤±0,2 at 37 °C	≤±0,5 at 37 °C	20		200
BD 53			S±0,5 dl 57 C	53		400
BD 115	Ambient +5100		≤±0,4 at 37 °C	115	Natural convection	400
BD 240	Ambient +5100	≤±0,1 at 37 °C	≤±0,5 at 37 °C	240	- Natural convection	680
BD 400				400		850
BD 720				720		1250
Models with forced conv	vection					
BF 53			≤±0,4 at 37 °C	53		400
BF 115		~ i 0 2 a+ 27 9C	≤±0,3 at 37 °C	115		400
BF 240	Ambient +5100	≤±0,2 at 37 °C		240	Forced convection	680
BF 400			~ I 0 1 at 27 90	400		850
BF 720		≤±0,1 at 37 °C	≤±0,1 at 37 °C ≤±0,4 at 37 °C			1250

Туре	Shelves supplied (max.)	Weight (kg)	W×D×H ext. (mm)	W×D×H int. (mm)	Pk	Cat. No.
Models with natural conve	ction					
BD 23	2 (3)	26	435×610×495	222×277×330	1	390-6146
BD 53	2 (4)	43	635×665×620	400×330×400	1	390-6037
BD 115	2 (5)	61	835×735×705	600×400×480	1	390-6039
BD 240	2 (7)	93	1035×835×825	800×500×600	1	390-6041
BD 400	2 (10)	135	1235×855×1025	1000×500×800	1	390-6034
BD 720	2 (15)	191	1235×955×1530	1000×600×1200	1	390-6035
Models with forced convec	tion					
BF 53	2 (5)	43	635×665×620	400×330×400	1	390-0006
BF 115	2 (5)	64	835×735×705	600×400×480	1	390-0007
BF 240	2 (7)	104	1035×835×825	800×500×600	1	390-0008
BF 400	2 (10)	145	1235×855×1025	1000×500×800	1	390-0009
BF 720	2 (15)	180	1235×955×1530	1000×600×1200	1	390-0010





### Incubators, Generation 2012, IN/INplus (natural convection) and IF/IFplus (forced convection) Memmert



The Generation 2012 range has natural and forced convection models with a temperature range up to +80 °C. There is a choice of two different displays, SingleDISPLAY or TwinDISPLAY depending on the application. All models have stainless steel inner chamber and housing, ensuring long working life and easy cleaning. These incubators have an integrated data logger and digital timer which is adjustable from 1 minute to 99 days and 23 hours. All models with TwinDISPLAY feature the intuitive control and logging software, AtmoCONTROL, which uses drag and drop symbols to input values. The software allows online monitoring of up to 32 connected appliances and can send an automatic alarm message to one or several e-mail addresses. INplus and IFplus units have a 4 hour sterilisation cycle at 160 °C. Complex ramping processes can be programmed quickly and easy for TwinDISPLAY models. The SetpointWAIT function ensures the process time does not start before the set temperature is reached. This feature can also be used with additional, freely positionable PT100 sensors, so that the process time starts when the set temperature is reached at all measuring points.

#### SingleDISPLAY models, ideal for standard applications:

- ControlCOCKPIT parameters: Temperature (Celsius or Fahrenheit), fan speed, exhaust air flap position, program time, time zones and daylight-saving time
- One PT100 temperature sensor in a 4-wire circuit and Ethernet interface for exporting the protocol log
- Double over-temperature protection including visual alarm: Electronic temperature monitoring with freely adjustable monitoring temperature and mechanical temperature limiter TB Class 1, according to DIN 12880, which switches off the heating if the maximum permitted temperature is exceeded by approx. 10 °C

#### TwinDISPLAY models, ideal for complex ramping processes:

- Intuitive, user friendly ovens with 2 TFT displays. ControlCOCKPIT with USB port. ControlCOCKPIT parameters as above
- Two PT100 sensors in a 4-wire circuit for mutual monitoring, taking over functions in case of an error
- The HeatBALANCE function allows application specific adjustment of heating power distribution (balance) between the upper and lower heating areas
- Logged protocol data is displayed on the ControlCOCKPIT (max 10 000 values correspond to approx. 1 week)
- Ethernet interface for reading out the protocol log and for uploading and implementing programmes and for online logging
- Multiple over-temperature protection with audible and visual alarm: Electronic temperature monitoring TWW/TWB adjustable on display (independent adjustable temperature safety device Class 3.1, which protects the samples and the incubator) and mechanical temperature limiter TB (protection Class 1) according to DIN 12880. AutoSAFETY automatically adjusts to the set value within a freely adjustable tolerance range. Setting individual MIN / MAX values for over- or under-temperature

**Ordering information:** Supplied without shelves, please order required shelves, stainless steel grids or trays separately. Range of accessories and factory fitted options such as access ports, interior sockets, lighting and interior door are available on request. Please contact VWR for further details prior to ordering as these cannot be retro-fitted.

Model	Temperature range (°C)	Temperature fluctuation (time) (°C)	Temperature variation (spatial) (°C)	Capacity (I)	Power consumption (W)	Weight (kg)
IN and INplus models	with natural convection					
IN30				32	800	44
IN55				53	1000	55
IN75				74	1250	64
IN110	RT* +580	4.02 at 27.90	4.0 C at 27.9C	108	1400	72
IN160	K1" +580	≤±0,3 at 37 °C	≤±0,6 at 37 °C	161	1600	80
IN260				256	1700	96
IN450				449	1800	160
IN750				749	2000	192
IF and IFplus models	with forced convection					
IF30				32	800	44
IF55				53	1000	55
IF75				74	1250	64
IF110	DT* . 10 . 00	02-+2706	0.2 -+ 27.00	108	1400	72
IF160	RT* +1080	≤±0,2 at 37 °C	≤± 0,3 at 37 °C	161	1600	80
IF260				256	1700	96
IF450				449	1800	160
IF750				749	2000	192

Туре	Shelves supplied (max.)	W×D×H ext. (mm)	W×D×H int. (mm)	Pk	Cat. No.
IN and INplus models with natu	ral convection				
IN30 with SingleDISPLAY	0 (3)	585×434×707	400×250×320	1	390-0650
IN30plus with TwinDISPLAY	0 (3)	585×434×707	400×250×320	1	390-0651
IN55 with SingleDISPLAY	0 (4)	585×514×787	400×330×400	1	390-0654
IN55plus with TwinDISPLAY	0 (4)	585×514×787	400×330×400	1	390-0655
IN75 with SingleDISPLAY	0 (6)	585×514×947	400×330×560	1	390-0656
IN75plus with TwinDISPLAY	0 (6)	585×514×947	400×330×560	1	390-0659
IN110 with SingleDISPLAY	0 (5)	745×584×867	560×400×480	1	390-0644
IN110plus with TwinDISPLAY	0 (5)	745×584×867	560×400×480	1	390-0645
IN160 with SingleDISPLAY	0 (8)	745×584×1107	560×400×720	1	390-0646
IN160plus with TwinDISPLAY	0 (8)	745×584×1107	560×400×720	1	390-0647
IN260 with SingleDISPLAY	0 (9)	824×684×1186	640×500×800	1	390-0648
IN260plus with TwinDISPLAY	0 (9)	824×684×1186	640×500×800	1	390-0649
IN450 with SingleDISPLAY	0 (8)	1224×784×1247	1040×600×720	1	390-0652
IN450plus with TwinDISPLAY	0 (8)	1224×784×1247	1040×600×720	1	390-0653
IN750 with SingleDISPLAY	0 (14)	1224×784×1726	1040×600×1200	1	390-0657
IN750plus with TwinDISPLAY	0 (14)	1224×784×1726	1040×600×1200	1	390-0658
IF and IFplus models with force	d convection				
IF30 with SingleDISPLAY	0 (3)	585×434×707	400×250×320	1	390-0634
IF30plus with TwinDISPLAY	0 (3)	585×434×707	400×250×320	1	390-0635
IF55 with SingleDISPLAY	0 (4)	585×514×787	400×330×400	1	390-0638
IF55plus with TwinDISPLAY	0 (4)	585×514×787	400×330×400	1	390-0639
IF75 with SingleDISPLAY	0 (6)	585×514×947	400×330×560	1	390-0640
IF75plus with TwinDISPLAY	0 (6)	585×514×947	400×330×560	1	390-0643
IF110 with SingleDISPLAY	0 (5)	745×584×867	560×400×480	1	390-0628
IF110plus with TwinDISPLAY	0 (5)	745×584×867	560×400×480	1	390-0629
IF160 with SingleDISPLAY	0 (8)	745×584×1107	560×400×720	1	390-0630
IF160plus with TwinDISPLAY	0 (8)	745×584×1107	560×400×720	1	390-0631
IF260 with SingleDISPLAY	0 (9)	824×684×1186	640×500×800	1	390-0632
IF260plus with TwinDISPLAY	0 (9)	824×684×1186	640×500×800	1	390-0633
IF450 with SingleDISPLAY	0 (8)	1224×784×1247	1040×600×720	1	390-0636
IF450plus with TwinDISPLAY	0 (8)	1224×784×1247	1040×600×720	1	390-0637
IF750 with SingleDISPLAY	0 (14)	1224×784×1726	1040×600×1200	1	390-0641
IF750plus with TwinDISPLAY	0 (14)	1224×784×1726	1040×600×1200	1	390-0642

\* RT = Ambient
For details of the range of shelves and grids, please visit www.vwr.com or contact your local VWR sales office.



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### Compact incubator with forced convection, Heratherm® Thermo Scientific



Heratherm® Compact incubator features forced convection providing excellent temperature uniformity and stability, and fast recovery times after opening the door. This unit is recommended for use as a personal work space on the bench top, and for BOD/water pollution testing. The unit is made of corrosion-free, easy to clean moulded polymer with rounded corners. An internal light and window in door facilitate sample observation.

- Easy to use control interface
- Display resolution 1 °C
- Minimal bench space needed ideal for space-restricted lab areas

Delivery information: Supplied with two stainless steel perforated, non tip shelves.

Model	IMC18
Temperature range (°C)	+1740
Temperature fluctuation (time) (°C)	± 0,2 at 37 °C
Temperature variation (spatial) (°C)	±1,2 at 37 °C
Capacity (I)	18
Convection type	Forced convection
Shelves supplied (max.)	2 (3)
Internal W×D×H (mm)	180×290×310
External W×D×H (mm)	260×470×415
Power consumption (W)	45
Weight (kg)	7,2

туре		PK	Cat. No.
IMC18 Compact benchtop incubator		1	390-0466
Description	For	Pk	Cat. No.
-1 14			

IMC18 Compact 18 litre incubator





466-0311

### Incubators with natural convection, General Protocol Heratherm® Thermo Scientific



Perforated stainless steel shelf

Heratherm® General Protocol incubators feature a smooth stainless steel inner chamber with an internal glass door, allowing samples to be viewed without impacting on temperature stability with natural convection providing gentle airflow and minimal drying. These units are recommended for a wide range of routine laboratory applications in pharmaceutical, medical, food and research laboratories and for microbiology and yeast growth. Units have an easy calibration routine and provide enhanced sample safety with an automatic over-temperature alarm to protect samples and incubator.

- Intuitive user interface for easy temperature setting with large, easy to read vacuum fluorescent display
- Flexible shelf system can be removed with just a finger click, ensuring easy cleaning of the chamber
- Models feature a RS232 interface as standard
- Units can be stacked on top of each other to save space, no tools or stacking devices are required

**Delivery information:** Supplied with two perforated stainless steel shelves. A range of options and accessories are available, please enquire for details.

Model	IGS60 IGS100 IGS180					
Temperature range (°C)		Ambient +575				
Temperature fluctuation (time) (°C)		±0,2 at 37 °C				
Temperature variation (spatial) (°C)		±0,6 at 37 °C				
Capacity (I)	75 117 194					
Convection type		Natural convection				
Shelves supplied (max.)	2 (13)	2 (16)	2 (19)			
Internal W×D×H (mm)	354×414×508 464×414×608 464×589×708					
External W×D×H (mm)	530×565×720 640×565×820 640×738×920					
Weight (kg)	40	51	65			

Type	Pk	Cat. No.
IGS60	1	390-0467
IGS100	1	390-0468
IGS180	1	390-0469



Description	For	Pk	Cat. No.
Shelves for Heratherm® incubators			
Perforated stainless steel shelf	General Protocol incubators with 60 litre capacity	1	466-0307
Perforated stainless steel shelf	General Protocol incubators with 100 litre capacity	1	466-0308
Perforated stainless steel shelf	General Protocol incubators with 180 litre capacity	1	466-0309
Stacking kits			
Stacking kit	All General Protocol, Advanced Protocol and Advanced Protocol Security models with 60 litre capacity	1	466-0301
Stacking kit	All General Protocol, Advanced Protocol and Advanced Protocol Security models with 100 litre capacity	1	466-0302
Stacking kit	All General Protocol, Advanced Protocol and Advanced Protocol Security models with 180 litre capacity	1	466-0303





## Incubators with dual convection, Heratherm® Advanced Protocol Thermo Scientific





Heratherm® Advanced Protocol incubators feature dual convection which allows the user to select the fan speed, from 0 up to 100%. Air speed can be adjusted to give optimum airflow depending on the application. These units are recommended for a wide range of demanding laboratory applications as well as egg incubation, gene cloning and heated storage of media. The incubators have a smooth stainless steel inner chamber with easy to clean, rounded corners; the shelf system can be quickly removed with one click. Units feature an internal glass door, allowing samples to be viewed without impacting on temperature stability. Units can be stacked on top of each other to save space, no tools or stacking devices are required. Sample safety is enhanced with automatic over-temperature alarm to protect samples and incubator. No need to set alarm manually. Multiple safety features protect samples. The advanced digital timer can turn unit off at specific time - can be used to interrupt cell growth at a specified time: Choose from real time or hour-settings. Unit is switched on and off at specified time - no wasted energy when unit is not in use. Due to the wide temperature range and large access port the units can even be used for drying applications.

- Dual convection allows incubator to be used as a natural convection incubator and as a incubator with controllable forced convection with good temperature performance in both modes
- Intuitive user interface with large vacuum fluorescent display for easy temperature setting
- Fitted as standard with RS232 interface and 42 mm access port to enable insertion of sensors for independent data monitoring

**Delivery information:** Supplied with two perforated stainless steel shelves. A wide range of options and accessories are available. Factory fitted options include left-hinged door, please enquire for details.

Model	Temperature range (°C)	Temperature fluctuation (time) (°C)	Temperature variation (spatial) (°C)	Capacity (I)	Convection type	Power rating (W)	Weight (kg)
Models with coated	Models with coated exterior						
IMH60			*±0,2 at 37 °C	66		850	45
IMH100	Ambient +5105	±0,1 at 37 °C	*±0,3 at 37 °C	104	Dual convection	1100	56
IMH180			*±0,4 at 37 °C	178	1	1300	70
Models with stainles	Models with stainless steel exterior						
IMH60 SS			*±0,2 at 37 °C	66		850	45
IMH100 SS	Ambient +5105	±0,1 at 37 °C	*±0,3 at 37 °C	104	Dual convection	1100	56
IMH180 SS			*±0,4 at 37 °C	178		1300	70

Туре	Shelves supplied (max.)	W×D×H int. (mm)	W×D×H ext. (mm)	Pk	Cat. No.
Models with coated exterior					
IMH60	2 (13)	354×368×508	530×565×720	1	390-0470
IMH100	2 (16)	464×368×608	640×565×820	1	390-0471
IMH180	2 (19)	464×543×708	640×738×920	1	390-0472
Models with stainless steel exterior					
IMH60 SS	2 (13)	354×368×508	530×565×720	1	390-0476
IMH100 SS	2 (16)	464×368×608	640×565×820	1	390-0477
IMH180 SS	2 (19)	464×543×708	640×738×920	1	390-0478

Description	For	Pk	Cat. No.
Shelves for Heratherm® incubators			
Perforated stainless steel shelf	Advanced Protocol/Advanced Protocol Security incubators with 60 litre capacity	1	466-0297
Perforated stainless steel shelf	Advanced Protocol/Advanced Protocol Security incubators with 100 litre capacity	1	466-0298
Perforated stainless steel shelf	Advanced Protocol/Advanced Protocol Security incubators with 180 litre capacity	1	466-0299
Support stands with castors			
Support stand with castors (height 187 mm)	All General Protocol, Advanced Protocol and Advanced Protocol Security models with 60 litre capacity	1	466-0304
Support stand with castors (height 187 mm)	All General Protocol, Advanced Protocol and Advanced Protocol Security models with 100 litre capacity	1	466-0305
Support stand with castors (height 187 mm)	All General Protocol, Advanced Protocol and Advanced Protocol Security models with 180 litre capacity	1	466-0306

<sup>\*</sup>Note spatial deviation is slightly higher with fan off - this mode will reduce samples drying out.





# Incubators with dual convection, Heratherm®, Advanced Protocol Security Thermo Scientific



Heratherm® Advanced Protocol Security incubators feature dual convection which allows the user to select the fan speed from 0 up to 100%. Air speed can be adjusted to give optimum airflow depending on the application. These units are recommended for a wide range of demanding laboratory applications as well as food and beverage and pharmaceutical stability testing. The incubators have a smooth stainless steel inner chamber with easy to clean, rounded corners. Units feature an internal glass door, allowing samples to be viewed without impacting on temperature stability, a lockable outer door restricts access. Units can be stacked on top of each other to save space, no tools or stacking devices are required. Due to decontamination cycle at 140 °C, contaminating microorganisms are reduced to a minimum, which is comparable to sterilisation within a six hour cycle. No need for separate autoclaving of interior fittings. Sample safety is enhanced with automatic over- and under-temperature alarm to protect samples and incubator. The advanced digital timer can turn the unit off at a specific time - can be used to interrupt cell

growth at a specified time: Choose from real time or hour settings. Unit is switched on and off at specified time - no wasted energy when unit is not in use. Units have a connection for optional sample sensor which measures exact sample temperature and this is shown separately on display.

- Decontamination routine reduces risk of cross-contamination; cycle at 140 °C is certified by an accredited microbiological institute (IBFE)
- Dual convection allows incubator to be used as a natural convection incubator and as a incubator with controllable forced convection with good temperature performance in both modes
- Intuitive user interface with large vacuum fluorescent display for easy temperature setting
- Lockable outer door and audible alarm if door left open provide extra security and restrict access
- Fitted as standard with RS232 interface and 42 mm access port to enable insertion of sensors for independent data monitoring

**Delivery information:** Supplied with two perforated stainless steel shelves. A wide range of options and accessories are available, including optional sample sensor and shelves for various applications. Factory fitted options include left-hinged door, and additional access ports - please enquire for details.

Model	Temperature range (°C)	Temperature fluctuation (time) (°C)	Temperature variation (spatial) (°C)	Capacity (I)	Convection type	Power rating (W)	Weight (kg)
Models with coated exterior							
IMH60-S			* ±0,2 at 37 °C	66			45
IMH100-S	Ambient +5105	±0,1 at 37 °C	* ±0,3 at 37 °C	104	Dual convection	1390	56
IMH180-S			* ±0,4 at 37 °C	178			70
Models with stainle	ss steel exterior						
IMH60-S SS			* ±0,2 at 37 °C	66			45
IMH100-S SS	Ambient +5105	±0,1 at 37 °C	* ±0,3 at 37 °C	104	Dual convection	1390	56
IMH180-S SS			* ±0,4 at 37 °C	178			70

Туре	Shelves supplied (max.)	W×D×H ext. (mm)	W×D×H int. (mm)	Pk	Cat. No.
Models with coated exterior					
IMH60-S	2 (13)	530×565×720	354×368×508	1	390-0473
IMH100-S	2 (16)	640×565×820	464×368×608	1	390-0474
IMH180-S	2 (19)	640×738×920	464×543×708	1	390-0475
Models with stainless steel exterio	or				
IMH60-S SS	2 (13)	530×565×720	354×368×508	1	390-0479
IMH100-S SS	2 (16)	640×565×820	464×368×608	1	390-0480
IMH180-S SS	2 (19)	640×738×920	464×543×708	1	390-0481

Description	For	Pk	Cat. No.		
Shelves for Heratherm® incubators	roi	FK	Cat. No.		
Perforated stainless steel shelf	Advanced Protocol/Advanced Protocol Security incubators with 60 litre capacity	1	466-0297		
		1			
Perforated stainless steel shelf	Advanced Protocol/Advanced Protocol Security incubators with 100 litre capacity	1	466-0298		
Perforated stainless steel shelf	Advanced Protocol/Advanced Protocol Security incubators with 180 litre capacity	1	466-0299		
Support stands with castors					
Support stand with castors (height 187 mm)	All General Protocol, Advanced Protocol and Advanced Protocol Security models with 60 litre capacity	1	466-0304		
Support stand with castors (height 187 mm)	All General Protocol, Advanced Protocol and Advanced Protocol Security models with 100 litre capacity	1	466-0305		
Support stand with castors (height 187 mm)	All General Protocol, Advanced Protocol and Advanced Protocol Security models with 180 litre capacity	1	466-0306		
Sensor for Heratherm® Advanced Protocol Security incubators					
Sample sensor	Heratherm® Advanced Protocol Security incubators	1	466-0310		

\*Note spatial variation is slightly higher with fan off - this mode will reduce samples drying out.

# Incubators, large capacity, Heratherm® General Protocol and Advanced Protocol Security series Thermo Scientific





Heratherm® large capacity incubators were designed to prevent samples drying out. All models have a large, easy to view, vacuum fluorescence display and simple to use touch button operation which is controlled by a microprocessor and automatic over-temperature alarm system to protect samples.

#### General Protocol incubators

The General Protocol incubators provide gentle heating via natural convection ideal for high sample volume or larger samples. Units have easy to clean corrosion-resistant stainless steel (1.4016) inner chambers, an intuitive user interface, easy to read display and lockable castors for easy set-up, stability and mobility in the lab. There is a choice of 2 sizes, 400 or 750 litres.

- Low overall energy consumption: Up to 25% energy savings compared to conventional units
- Protect delicate samples while still offering a uniformity of ±0,5 °C and temperature stability of 0,4 °C at 37 °C
- Doors can be opened over 180° for ease of access and units have easy to remove shelves for cleaning, inner glass door allows viewing without disturbing samples
- Access port at rear (38 mm Ø) for independent data monitoring, included as standard
- Timer function to programme start or switch off times for additional energy savings

## **Advanced Protocol Security incubators**

The Heratherm Advanced Protocol Security incubators offer forced convection via a 2-speed fan for applications that require either slow speed or high speed for better temperature stability and uniformity. Units have resistant stainless steel (1.4301) inner chambers and access port (42 mm Ø) for external sensors for independent data monitoring, or other devices for specific test set-ups. Greater flexibility, accuracy and dependability are provided through a wide range of additional features. There is a choice of 2 sizes, 400 or 750 litres, units are also available with stainless steel exteriors.

- Fan has slow speed for applications that require slow speed to avoid sample drying out and high speed for better temperature stability and uniformity
- Wide temperature range: Ambient +5 to 105 °C, units can be used for some drying applications
- Certified decontamination cycle at 140 °C eliminiating the need for separate autoclaving or use of toxic decontaminants
- Door alarm alerts user if door is left open
- Sophisticated timer provides choice of simple on/off timer, recurring weekly timer or set incubator activity based on the 24 hour clock

**Delivery information:** Supplied with 2 stainless steel perforated shelves, additional shelves are available as optional accessories.

Model	IGS400	IGS750	IMH400	IMH750	
Temperature range (°C)	Ambien	t +575	Ambient	:+5105	
Temperature fluctuation (time) (°C)	±0,4 a	t 37 °C	±0,2 at 37 °C		
Temperature variation (spatial) (°C)	±0,5 at 37 °C	±1,3 at 37 °C	±0,2 at 37 °C	±0,3 at 37 °C	
Capacity (I)	405	747	381	702	
Convection type	Natural c	onvection	Forced co	onvection	
Shelves supplied (max.)			2 (39)		
Internal W×D×H (mm)	544×569×1307	1004×569×1307	544×524×1335	1004×524×1335	
External W×D×H (mm)	778×770×1545	1261×770×1545	778×770×1545	1261×770×1545	
Power rating (W)	1200	1500	1400	1600	
Weight (kg)	55	80	87	149	

Туре	Pk	Cat. No.
General Protocol series with natural convection		
IGS400 high capacity incubator with natural convection	1	390-0696
IGS750 high capacity incubator with natural convection	1	390-0699
Advanced Protocol Security series with forced convection		
IMH400 high capacity incubator with forced convection	1	390-0697
IMH400 high capacity incubator with forced convection and stainless steel exterior	1	390-0698
IMH750 high capacity incubator with forced convection	1	390-0700
IMH750 high capacity incubator with forced convection and stainless steel exterior	1	390-0701





## **Incubators, MINI Digital series**



Reliable, efficient, general purpose incubators, to suit most biological analysis, research and general laboratory applications. These units from Genlab have a sheet steel exterior finished with an easy to clean powder coated paint. The interior chamber is made from mild steel coated with aluminium (CLAD). They are heated via Incoloy sheathed elements fitted around the fan on the back or side wall of the chamber. Incubators have fixed shelf runners and removable chrome plated wire grid shelves. The top vent is fitted with a clip to hold a glass immersion thermometer. The units are fitted with a PID microprocessor controller with dual displays of set point and actual temperature, which are auto tuned for each individual unit to optimise the heat up, overshoot and control of temperature. They also include main switch with indicator and heat and overheat indicators.

- Temperature fluctuation ±0,2 °C at 37 °C
- Temperature range: ambient +5 to 70 °C
- Microprocessor digital controller with dual display of set point and actual temperature
- Independent adjustable temperature safety system with visual alarm saves the samples and the incubator

**Delivery information:** Supplied with removable chrome plated wire grid shelves. Options including natural air convection, process timer, stainless steel interior, clear inner door and door with viewing window are available, please contact your local VWR office for details.

Model	MINI/30/DIG	MINI/50/DIG	MINI/75/DIG	MINI/100/DIG	MINI/125/DIG	MINI/150/DIG	MINI/200/DIG	
Temperature range (°C)		RT* +570						
Temperature fluctuation (time) (°C)		±0,2 at 37 °C						
Capacity (I)	30	50	75	100	125	150	200	
Convection type	Forced convection							
Shelves supplied (max.)	2 (2)	2	2 (3)		3 (5)		4 (7)	
Internal W×D×H (mm)	360×350×240	490×330×330	490×450×330	490×450×450	490×450×550	490×530×550	490×530×750	
External W×D×H (mm)	500×620×560	630×590×650	630×720×650	630×720×770	630×720×870	630×800×870	630×800×1070	
Weight (kg)	20	26	34	44	57	66	85	

Туре	Pk	Cat. No.
MINI/30/DIG	1	390-0858
MINI/50/DIG	1	390-0859
MINI/75/DIG	1	390-0860
MINI/100/DIG	1	390-0854
MINI/125/DIG	1	390-0855
MINI/150/DIG	1	390-0856
MINI/200/DIG	1	390-0857

<sup>\*</sup> RT = Ambient



# **Incubators, Premier range**



Genlab Premier incubators (PRI) are a range of fully functional, highly efficient units to suit most biological analysis, research and general laboratory applications. The exterior is constructed from sheet steel finished in an easy clean, powder coated paint and the interior chamber is made from stainless steel. The PRI incubators have a solid steel outer door with a glass inner door (model MINI/6 does not have an inner glass door). Incubators are heated by Incoloy sheathed elements positioned around the fan fitted at the back of the chamber. PRI units have forced convection, and the MINI/6 unit features natural convection. Units are fitted with fixed shelf runners and removable chrome plated wire grid shelves. The PRI incubators feature digital microprocessor controller with dual display of set point and actual temperature, and a 0 - 999 hour process timer. The MINI/6's control system comprises of a direct reading thermostat and over-temperature thermostat both with calibrated scales and tamper-proof locks, the controls are positioned below the door.

- PID microprocessor controller with dual display of set point and actual temperature, which are auto-tuned for each individual unit to optimise the heat up, overshoot and control of temperature (PRI models only)
- Controller has a 0-999 h process timer that can be selected for a fixed time period at a required set point (PRI models only)
- Control panel includes heat and overheat indicators

**Delivery information**: Supplied with chrome plated wire grid shelves.

Model	Temperature range (°C)	Temperature fluctuation (time) (°C)	Temperature variation (spatial) (°C)	Capacity (I)	Convection type	Internal W×D×H (mm)	External W×D×H (mm)
MINI/6				6	Natural convection	230×190×150	350×330×410
PRI/30				30	Forced convection	240×360×350	500×480×620
PRI/50			1,2 at 37 °C	50		400×360×350	660×480×620
PRI/75		0.15 at 27.90		75		460×490×330	720×610×600
PRI/100	Ambient +570	0,15 at 37 °C		100		440×490×460	700×610×730
PRI/125				125		550×490×460	810×610×730
PRI/150				150		520×530×540	780×650×810
PRI/200				200		690×530×540	950×650×810

Туре	Shelves supplied (max.)	Pk	Cat. No.
MINI/6/SS	1 (1)	1	390-0337
PRI/30	2 (2)	1	390-0484
PRI/50	2 (3)	1	390-0485
PRI/75	2 (3)	1	390-0486
PRI/100	3 (4)	1	390-0487
PRI/125	3 (5)	1	390-0488
PRI/150	3 (5)	1	390-0489
PRI/200	4 (7)	1	390-0490







# Cooled incubators, INCU-Line®







IR 250R Premium

These cooled incubators with forced air convection feature a stainless steel inner chamber and a powder coated sheet exterior for standard models or a stainless steel linen finish exterior for the Premium models. The IL 68R has an external glass door, the IL 150R/250R and IL 150R/250R Premium models have a solid outer door and glass inner door. All models have an internal LED light, 30 mm access port, real time clock, timer, internal electrical socket, RS232C interface, USB port and test results memory function to recall temperature data or events. All models have the following safety features:

- Adjustable over- and under-temperature safety thermostat Class 3.3 protects the samples and the incubator
- Power failure control system, audible clock alarm
- Door lock and open door alarm

Standard controller models feature:

- Microprocessor controller with LCD graphic display, stores up to 3× six-segment programs
- Temperature range +3 to 70 °C

In addition, the Premium models (IL 150R / IL 250R) also have:

- Full colour LCD touch screen, displays the values in tabular or graphic form
- Access control via login, 20 user program memory, 7 days programming
- USB port to save data on flash drives
- Ethernet connection and remote control via Internet
- Fan speed control (50 to 100%)
- Adjustable heating and cooling system

**Delivery information**: Supplied with coated wire shelves, test certificate (data measured at 37 °C) and Basic Control Software. Premium models (390-0730, 390-0732) are supplied with stainless steel wire shelves, Ethernet cable, test certificate (data measured at 37 °C) and Premium Control Software.

Model	IL 68R	IL 150R	IL 250R	IL 150R Premium	IL 250R Premium				
Temperature range (°C)		+370							
Temperature fluctuation (time) (°C)	±0,1 at 37 °C	±0,2 at 37 °C	±0,3 at 37 °C	±0,2 at 37 °C	±0,3 at 37 °C				
Temperature variation (spatial) (°C)	±0,3 at 37 °C	±0,8 at 37 °C	±1,0 at 37 °C	±0,8 at 37 °C	±1,0 at 37 °C				
Capacity (I)	68	143	245	143	245				
Convection type		Forced convection							
Shelves supplied (max.)	2 (2)	3 (4)	4 (6)	3 (4)	4 (6)				
Internal W×D×H (mm)	470×300×430	520×400×660	520×400×1060	520×400×660	520×400×1060				
External W×D×H (mm)	570×670×600	620×640×860	620×640×1260	620×640×920	620×640×1320				
Weight (kg)	38	63	84	63	84				
Nominal power consumption (W)	160	170	330	170	330				

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Туре	Pk	Cat. No.
Standard cooled incubators		
IL 68R cooled incubator	1	390-0728
IL 150R cooled incubator	1	390-0729
IL 250R cooled incubator	1	390-0731
Premium cooled incubators		
IL 150R Premium cooled incubator	1	390-0730
IL 250R Premium cooled incubator	1	390-0732

# Refrigerated incubators, KB series Binder



Refrigerated incubators are mainly used for culturing tasks that need to be carried out at temperatures below room temperature or if high ambient temperatures cannot be avoided. The DCT™ cooling system and the controllable fan guarantee high degrees of humidity even during cooling mode or prolonged testing, to protect samples from drying out. Design includes an internal glass door. Units up to 115 litres can be stacked on top of each other to save space. Safety features include an independent adjustable temperature safety device Class 3.1 with a visual alarm, which protects the samples and the incubator. All units have a microprocessor program controller, with LED display, with 2 programs each with 10 sections; alternatively 1 program with 20 sections and various timer functions; temperature monitor Class 3.1 (DIN 12880); elapsed time indicator. RS422 interface for communication software APT-COM™ DataControlSystem (software optional) or can be switched to printer output with accessory RS232/RS422 interface converter; adjustable printing intervals.

- Electronically controlled APT.line™ preheating chamber and DCT™ refrigeration system provide ideal
  conditions for temperature accuracy and reproducible results in both heating and cooling situations
- Minimal dehumidification of specimens and impressive performance
- Adjustable fan speed
- Foam insulation, contains no FCHCs, environmentally friendly refrigerant R 134a
- Cleaning and disinfection by hot air sterilisation at 100 °C

**Delivery information:** Supplied with 2 chrome plated racks and Binder test certificate. Calibrations and validations possible, for details please contact your local VWR sales office.

		vallactions pos	sibile, ioi details piedse	contact your local titl		
Model	KB 23	KB 53	KB 115	KB 240	KB 400	KB 720
Temperature range (°C)	0+100			-5+100		
Temperature fluctuation (time) (°C)	±0,2 at 25 °C			±0,1 at 25 °C		
Temperature variation (spatial) (°C)	±0,3 at 25 °C	±0,2 at 25 °C	±0,1 at 25 °C		±0,2 at 25 °C	
Capacity (I)	20	53	115	240	400	700
Convection type			Forced co	onvection		
Shelves supplied (max.)	2 (3)	2 (4)	2 (5)	2 (9)	2 (	15)
Internal W×D×H (mm)	222×277×330	400×330×400	600×400×480	650×485×785	650×485×1270	970×576×1250
External W×D×H (mm)	435×520×620	635×580×840	835×650×1025	930×800×1460	930×800×1945	1255×890×1925
Weight (kg)	44	72	105	170	220	309
Nominal power consumption (W)	340	460 1200			1400	2300

Type	Pk	Cat. No.
KB 23	1	390-6076
KB 53	1	390-6080
KB 115	1	390-6081
KB 240	1	390-0329
KB 400	1	390-0379
KB 720	1	390-0358



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# Refrigerated incubators with Peltier technology, forced convection, KT series Binder



These energy efficient cooled incubators have been designed for use in the temperature range from +4 to 100 °C. They feature a Peltier cooling system for finely controlled cooling down to 4 °C together with powerful conventional heating. The unit has easy to clean stainless steel interior and inner safety glass door. The incubators are ideal for use in microbiology, genetics, zoology, food and beverage industries, medicine, forensics, pharmaceutical and cosmetic industries. USB port for reading data and Ethernet interface for communication software APT-COM™ DataControlSystem.

- Protect sensitive samples and have a condensation-free interior
- Electronically controlled APT.line™ preheating chamber technology with powerful conventional heating, ensures rapid cool down times and short heating times
- User friendly controller with LCD monitor gives important parameters at a glance, has push button/rotary knob, variable programming options and stores up to 100 programs with 2 GB internal memory
- Disinfection cycle at 100 °C reduces contamination risk
- Independent adjustable temperature safety device Class 3.1 with visual and audible alarm, protects the samples and the incubator

**Delivery information:** Supplied with two stainless steel shelves and Binder test certificate. A wide range of options including access ports, internal power sockets and interior lighting are available. Calibration and validation to assist with GLP compliance are possible, for details please contact your local VWR sales office.

Model	KT 53	KT 115
Temperature range (°C)		.100
Temperature fluctuation (time) (°C)		t 37 °C
Temperature variation (spatial) (°C)	±0,2 at 37 °C	±0,3 at 37 °C
Capacity (I)	52	102
Convection type	Peltier elements and	conventional heating
Shelves supplied (max.)	2 (5)	2 (6)
Internal W×D×H (mm)	400×334×400	600×355×480
External W×D×H (mm)	660×693×632	860×720×715
Weight (kg)	65	88
Nominal power consumption (W)	1100	700

Туре	Pk	Cat. No.
KT 53	1	390-0695
KT 115	1	390-0612







# **Cooled incubators, Generation 2012, ICP series Memmert**



The Generation 2012 range of cooled incubators have a temperature range from below zero up to +60 °C, units ensure rapid and precise heating up and cooling down times without energy intensive power bursts. All models have stainless steel inner chamber and housing, ensuring long working life and easy cleaning. These compressor cooled incubators have an integrated data logger and digital timer which is adjustable from 1 minute to 99 days and 23 hours. All models feature the intuitive control and logging software, AtmoCONTROL, which uses drag and drop symbols to input values. The software allows online monitoring of up to 32 connected appliances and can send an automatic alarm message to one or several e-mail addresses. Complex ramping processes can be programmed quickly and easily. The SetpointWAIT function ensures the process time does not start before the set temperature is reached. This feature can also be used with additional, freely positionable PT100 sensors, so that the process time starts when the set temperature is reached at all measuring points.

## TwinDISPLAY models, ideal for complex ramping processes:

- Intuitive, user friendly ovens with 2 TFT displays. ControlCOCKPIT parameters: Temperature (Celsius or Fahrenheit), fan speed, programme time, time zones and daylight-saving time. ControlCOCKPIT with USB port
- Two PT100 sensors in a 4-wire circuit for mutual monitoring, taking over functions in case of an error
- Logged protocol data is displayed on the ControlCOCKPIT (max 10 000 values correspond to approx. 1 week)
- Ethernet interface for reading out the protocol log and for uploading and implementing programs and for online logging
- Multiple over-temperature protection with audible and visual alarm: Electronic temperature monitoring TWW safety device Class 3.3 or TWB safety device Class 2 adjustable on display (independent adjustable overtemperature, which protects the samples and the incubator) and mechanical temperature limiter TB (protection Class 1) acc. to DIN 12 880. AutoSAFETY automatically adjusts to the set value within a freely adjustable tolerance range. Setting individual min/max values for over- or under-temperature

**Ordering information:** Supplied without grids or shelves, please order required shelves, stainless steel grids or trays separately. Range of accessories and factory fitted options such as access ports, interior sockets and lighting are available on request. Please contact VWR for further details prior to ordering as these can not be retro-fitted.

Model	ICP55	ICP110	ICP260	ICP450	ICP750
Temperature range (°C)	-5+60		-12	+60	
Temperature fluctuation (time) (°C)			≤±0,1 at 37°C		

Continued on next page



Temperature variation (spatial) (°C)			≤±0,2 at 37°C			
Capacity (I)	53	108	256	449	749	
Convection type		Air jacket system				
Shelves supplied (max.)	0 (4)	0 (5)	0 (9)	0 (8)	0 (14)	
Internal W×D×H (mm)	400×330×400	560×400×480	640×500×800	400×330×400	1040×600×1200	
External W×D×H (mm)	585×514×1153	745×584×1233	824×684×1552	1224×784×1613	1224×784×1950	
Power consumption (W)	500 700 750 1200					
Weight (kg)	88	109	153	217	249	

Type	Pk	Cat. No.
ICP55 ICP110	1	390-0616
ICP110	1	390-0613
ICP260	1	390-0614
ICP450	1	390-0615
ICP750	1	390-0617

For details of the range of shelves and grids, please visit www.vwr.com or contact your local VWR sales office.





# Cooled incubators with Peltier, Generation 2012, IPP/IPPplus Memmert



The Generation 2012 range has a choice of Peltier cooled models with a temperature range up from zero up to +70 °C. There is a choice of two different displays, SingleDISPLAY or TwinDISPLAY depending on the application. Peltier technology provides energy efficient cooling and heating. The Peltier elements can be controlled individually ensuring homogenous temperature and humidity distribution in the chamber. All models have stainless steel inner chamber and housing, ensuring long working life and easy cleaning. These cooled incubators have an integrated data logger and digital timer which is adjustable from 1 minute to 99 days and 23 hours. IPPplus models with TwinDISPLAY feature the intuitive control and logging software, AtmoCONTROL, which uses drag and drop symbols to input values. The software allows online monitoring of up to 32 connected appliances and can send an automatic alarm message to one or several e-mail addresses. Complex ramping processes can be programmed quickly and easily for TwinDISPLAY models. The SetpointWAIT function ensures the process time does not start before the set temperature is reached. This feature can also be used with additional, freely positionable PT100 sensors, so that the process time starts when the set temperature is reached at all measuring points.

## SingleDISPLAY IPP models, ideal for standard applications:

- ControlCOCKPIT parameters: Temperature (Celsius or Fahrenheit), program time, time zones and daylight-saving time
- One PT100 temperature sensor in a 4-wire circuit and ethernet interface for reading out the protocol log
- Adjustable overtemperature monitor and mechanical temperature limiter

## TwinDISPLAY IPPplus models, ideal for complex ramping processes:

- Intuitive, user friendly ovens with 2 TFT displays. ControlCOCKPIT with USB port. ControlCOCKPIT parameters as above
- Two PT100 sensors in a 4-wire circuit for mutual monitoring, taking over functions in case of an error
- The HeatBALANCE function allows application specific adjustment of heating/cooling power distribution (balance) upper and lower Peltier elements for heating/cooling
- Logged protocol data is displayed on the ControlCOCKPIT (max 10 000 values correspond to approx. 1 week)
- Ethernet interface for reading out the protocol log and for uploading and implementing programs and for online logging
- Multiple overtemperature protection with audible and visual alarm: Electronic temperature monitoring TWW safety device Class 3.3 or TWB safety device Class 2, adjustable on display (independent adjustable over-temperature which protects the samples and the chamber) and mechanical temperature limiter TB (protection Class 1) according to DIN 12880. AutoSAFETY automatically adjusts to the set value within a freely adjustable tolerance range. Setting individual min/max values for over- or under-temperature

Ordering information: Supplied without grids or shelves, please order required shelves, stainless steel grids or trays separately. Range of accessories and factory fitted options such as access ports, interior sockets and lighting are available on request. Please contact VWR for further details prior to ordering as these can not be retro-fitted.

Model	Temperature range (°C)	Temperature fluctuation (time) (°C)	Temperature variation (spatial) (°C)	Capacity (I)	Power consumption (W)	Weight (kg)
SingleDISPLAY IPP mode	els					
IPP30				32	125	66
IPP55	0 70 (	≤±0,2 at 37°C ≤±0,5 at 37°C 1	53	175	73	
IPP110	070 (without light) 1040 (with light)			108	350	79
IPP260	1040 (with light)			256	525	89
IPP750				749	1050	99
TwinDISPLAY IPPplus m	odels					
IPP30				32	125	66
IPP55	0 70 (			53	175	73
IPP110	070 (without light) 1040 (with light)	≤±0,2 at 37°C	≤±0,5 at 37°C	108	350	79
IPP260	1040 (with light)			256	525	89
IPP750				749	1050	99

Туре	Shelves supplied (max.)	W×D×H ext. (mm)	W×D×H int. (mm)	Pk	Cat. No.
SingleDISPLAY IPP models					
IPP30 with SingleDISPLAY	0 (3)	585×524×707	400×250×320	1	390-0622
IPP55 with SingleDISPLAY	0 (4)	585×604×787	400×330×400	1	390-0624
IPP110 with SingleDISPLAY	0 (5)	745×674×867	560×400×480	1	390-0618
IPP260 with SingleDISPLAY	0 (9)	824×774×1186	640×500×800	1	390-0620
IPP750 with SingleDISPLAY	0 (14)	1224×874×1726	1040×600×1200	1	390-0626
TwinDISPLAY IPPplus models					
IPP30plus with TwinDISPLAY	0 (3)	585×524×707	400×250×320	1	390-0623
IPP55plus with TwinDISPLAY	0 (4)	585×604×787	400×330×400	1	390-0625
IPP110plus with TwinDISPLAY	0 (5)	745×674×867	560×400×480	1	390-0619
IPP260plus with TwinDISPLAY	0 (9)	824×774×1186	640×500×800	1	390-0621
IPP750plus with TwinDISPLAY	0 (14)	1224×874×1726	1040×600×1200	1	390-0627

For details of the range of shelves and grids, please visit www.vwr.com or contact your local VWR sales office.

# Refrigerated incubator, BK 800 Thermo Scientific



Cooled incubator with fan assisted air circulation. Ideal for incubation and storage at or below ambient temperatures, for sample and chemical storage, microbiological sample testing, water pollution testing, biochemical oxygen demand protocols, determining the expiry date of food and shelf life testing of food and cosmetics. Units have a white enamelled sheet steel exterior, high impact plastic interior with polyurethane foam insulation, and feature a magnetic door gasket. Units have built-in rear wheels for convenient positioning in the lab. Safety features include alarm and error messages for over-temperature, broken temperature sensor, temperature sensor short circuit, broken compressor, issues with fan and data memory errors. It is possible to correct the displayed temperature compared to actual temperature via the setup menu.

- Easy to use, soft touch control panel with digital display of actual temperature is conveniently positioned at the top of the unit
- Two internal sockets accommodate stirrers and other equipment which can be time controlled for defined cycles
- Cooling time 25 to 5 °C in 56 minutes, subject to load and ambient temperature
- Energy efficient units with high energy efficiency ratings, which means lower operating costs

**Delivery information:** Supplied with white plastic coated wire shelves. Additional shelves are available as optional accessories.

Model	BK 800
Temperature range (°C)	+340
Temperature fluctuation (time) (°C)	±1 at 37 °C
Temperature variation (spatial) (°C)	±1 dt 37 °C
Capacity (I)	220
Convection type	Forced convection
Shelves supplied (max.)	3 (14)
Internal W×D×H (mm)	467×435×1260
External W×D×H (mm)	560×570×1480
Weight (kg)	52
Nominal power consumption (W)	200

Туре	Pk	Cat. No.
BK 800	1	390-4316



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## Cooled incubators, Series 1A



#### Series 1A models

LMS Series 1A cooled incubators are temperature controlled cabinets with fan assisted air circulation via a pre-mixing chamber. The units have a white enamelled sheet steel exterior, white pre-coated aluminium interior and polyurethane foam insulation, and feature a door lock and magnetic door gasket. The inner chamber is easy to clean, disinfection procedures are detailed in the user manual. Controls are recessed in the control panel, to avoid accidental alteration. Full PID heating and cooling control, indicator for high temperature safety cutout. They are ideal for studying growth patterns of plants and insects, BOD tests, seed germination, tissue culture, enzyme testing, fruit fly culture, sample storage and product shelf life

- Easy to use controls with digital display of actual temperature on the standard controller or display of both set point and actual temperature on the programmable controllers
- Hermetically sealed refrigeration system, and suppressed RF and TV electronics
- Full PID heating and cooling control to ensure stable internal temperature
- Safety features include a preset 70 °C cutout for cabinet protection
- Heating time from 20 to 45 °C in 30 minutes, cooling time from 20 to 0 °C in 50 minutes, subject to load and ambient temperature

## Series 1A programmable NP models

The programmable option for LMS Series 1A is designed to offer the highest functionality and will enable the user to set up and run complex processes relying on accurate temperature control. The programmer function is able to control applications needing set point changes over time, e.g. ramp changes where a gradual rate of change can be set or step changes which are instantaneous. These can be separated by soak periods during which the process is held at a constant value. Each individual time interval of the program, or segment, together with its associated moving set point value, can be stored as a unique program. Via use of "event outputs" control of interior illumination and/or alarm function is also available. At the end of a sequence, a program can be arranged to repeat (or loop), either a specified number of cycles, or continuously. For safety reasons, three modes of recovery from power failure are available. These either automatically restart the program from the beginning, continue it from where it stopped or hold it, waiting for a user restart. Finally, chart recorder, data logging and configuration software for windows are available as optional extras. This software is designed to operate and program all functions of the controller and to data log the recorded process signals, including chart recorder for on screen viewing of trends, virtual instrument display, on screen alarm displays and remote set point

Ordering information: Supplied with white plastic coated wire shelves and self evaporating condensate drip tray. An extensive range of accessories and factory fitted options such as, units with automatic defrost, interior programmable fluorescent/UV lighting, inner perspex door, manual high/low temperature alarms (audible and visible) with safety cut out, built in chart recorder, temperature programmers, temperature controllers with RS485 interface and access ports are available on request. Optional conformance certificate and on-site UKAS accreditation of laboratory equipment are available on request, please enquire for further details. Please note; if your application involves Drosophila, a modification for aggressive environments is recommended. Please contact your local VWR office before placing your order.

Model	80	120	201	280	
Temperature range (°C)		-10.	+50		
Temperature fluctuation (time) (°C)		±0,1 a	t 37 °C		
Temperature variation (spatial) (°C)		±0,5 a	t 37 °C		
Capacity (I)	76	120	201	272	
Convection type		Forced co	onvection		
Shelves supplied (max.)	2 (5)	3 (15)	4 (20)	5 (30)	
Internal W×D×H (mm)	445×490×275*	445×490×475*	445×490×785*	445×490×1105*	
External W×D×H (mm)	520×580×750	520×580×1070	520×580×1430	520×580×1750	
Power consumption (W)	18	1800 2400			
Weight (kg)	40	55	65	75	

Туре	Pk	Cat. No.
80 standard model	1	390-0542
80A with dual temperature cycling	1	390-0543
80NP programmable model	1	390-0544
120 standard model	1	390-0532
120A with dual temperature cycling	1	390-0533
120NP programmable model	1	390-0534
201 standard model	1	390-0536
201A with dual temperature cycling	1	390-0537
201NP programmable model	1	390-0538
280 standard model	1	390-0539
280A with dual temperature cycling	1	390-0540
280NP programmable model	1	390-0541

<sup>\*</sup> Internal dimensions shown above are maximum dimensions, internal usable space will be less due to space occupied by refrigeration and airflow systems. Please note that with the maximum number of shelves fitted in a cabinet, there is only a 30 mm gap between each shelf.
"A" denotes dual temperature cycling models, "NP" denotes programmable models. The only difference is the programmable controller, all other specifications are the same for all types



of models.

## Cooled incubators, Series 2



#### Series 2 models

LMS Series 2 cooled incubators are temperature controlled cabinets with fan assisted air circulation via a pre-mixing chamber. The units have a white enamelled sheet steel exterior, high impact plastic interior and polyurethane foam insulation, and feature a door lock and magnetic door gasket. The corrosion resistant inner chamber is easy to clean, disinfection procedures are detailed in the user manual. Controls are recessed in the control panel, to avoid accidental alteration. Full PID heating and cooling control, indicator for high temperature safety cutout. They are ideal for studying growth patterns of plants and insects, BOD tests, seed germination, tissue culture, enzyme testing, fruit fly culture, sample storage and product shelf

- Easy to use controls with digital display of actual temperature on the standard controller or display of both set point and actual temperature on the programmable controllers
- Hermetically sealed refrigeration system, and suppressed RF and TV electronics
- Full PID heating and cooling control to ensure stable internal temperature
- Safety features include a preset 70 °C cutout for cabinet protection
- Heating time from 20 to 45 °C in 30 min, cooling time from 20 to 0 °C in 50 min, subject to load and ambient temperature

## Series 2 programmable NP models

The programmable option for LMS Series 2 cooled incubators is designed to offer the highest functionality and enables the user to set up and run complex processes relying on accurate temperature control. The programmer function is able to control applications needing set point changes over time, e.g. ramp changes where a gradual rate of change can be set or step changes which are instantaneous. These can be separated by soak periods during which the process is held at a constant value. Each individual time interval of the program, or segment, together with its associated moving set point value, can be stored as a unique program. Via use of "event outputs" control of interior illumination and/or alarm function is also available. At the end of a sequence, a program can be arranged to repeat (or loop), either a specified number of cycles, or continuously. For safety reasons, three modes of recovery from power failure are available. These either automatically restart the program from the beginning, continue it from where it stopped or hold it, waiting for a user restart. Finally, chart recorder, data logging and configuration software for Windows is available as optional extras. This software is designed to operate to program all functions of the controller and to data log the recorded process signals, including chart recorder for on screen viewing of trends, virtual instrument display, on screen alarm displays and remote set point

Ordering information: Supplied with white plastic coated wire shelves and self evaporating condensate drip tray. An extensive range of accessories and factory fitted options such as, units with automatic defrost, interior programmable fluorescent/UV lighting, inner perspex door, manual high/low temperature alarms (audible and visible) with safety cutout, built in chart recorder, temperature programmers, temperature controllers with RS485 interface and access ports are available on request. Optional conformance certificate and on site UKAS accreditation of laboratory equipment are available on request, please enquire for further details. Please note; if your application involves Drosophila, a modification for aggressive environments is recommended. Please contact your local VWR office before placing your order.

Model	210	220	230	240			
Temperature range (°C)		-10	.+50				
Temperature fluctuation (time) (°C)		±0,1 a	t 37 °C				
Temperature variation (spatial) (°C)		±0,5 a	t 37 °C				
Capacity (I)	pacity (I) 135		200 290				
Convection type		Forced convection					
Shelves supplied (max.)	3 (15)	4 (22)	4 (22) 5 (34)				
Internal W×D×H (mm)	545×425×610*	545×425×900*	545×425×1275*	680×530×1200*			
External W×D×H (mm)	×D×H (mm) 600×600×945 600×600×1300 600×6		600×600×1300 600×600×1670				
Power consumption (W)	1800	2400 3300					
Weight (kg)	45	61 85 100					

Туре	Pk	Cat. No.
210 standard model	1	390-0789
210A with dual temperature cycling	1	390-0790
210NP programmable model	1	390-0791
220 standard model	1	390-0792
220A with dual temperature cycling	1	390-0793
220NP programmable model	1	390-0794
230 standard model	1	390-0795
230A with dual temperature cycling	1	390-0796
230NP programmable model	1	390-0797
240 standard model	1	390-0798
240A with dual temperature cycling	1	390-0799
240NP programmable model	1	390-0800

<sup>\*</sup> Internal dimensions shown above are maximum dimensions, internal usable space will be less due to space occupied by refrigeration and airflow systems. Please note that with the maximum number of shelves fitted in a cabinet, there is only a 25 mm gap between each shelf.
"A" denotes dual temperature cycling models, "NP" denotes programmable models. The only difference is the programmable controller, all other specifications are the same for all types



of models.



## Cooled incubators, Series 3



#### Series 3 models

LMS Series 3 cooled incubators are temperature controlled cabinets with fan assisted air circulation via a pre-mixing chamber. The units have a white enamelled sheet steel exterior, stainless steel lined interior with polyurethane foam insulation, and feature a door lock and magnetic door gasket. The corrosion resistant inner chamber is easy to clean, disinfection procedures are detailed in the user manual. Controls are recessed in the control panel, to avoid accidental alteration. Full PID heating control, indicator for temperature overheat alarm. They are ideal for studying growth patterns of plants and insects, BOD tests, seed germination, tissue culture, enzyme testing and fruit fly culture.

- Units feature automatic defrost
- Easy to use controls with digital display of actual temperature (and set point for programmable
- Safety features include variable over-temperature alarm, safety cutout preset at 70 °C and refrigeration

isolation switch

- Hermetically sealed refrigeration system, and suppressed RF and TV electronics
- Full PID heating control to ensure stable internal temperature

## Series 3 programmable NP models

The programmable option for LMS Series 3 cooled incubators is designed to offer the highest functionality and enables the user to set up and run complex processes relying on accurate temperature control. The programmer function is able to control applications needing set point changes over time, e.g. ramp changes where a gradual rate of change can be set or step changes which are instantaneous. These can be separated by soak periods during which the process is held at a constant value. Each individual time interval of the program, or segment, together with its associated moving set point value, can be stored as a unique program. Via use of "event outputs" control of interior illumination and/or alarm function is also available. At the end of a sequence, a program can be arranged to repeat (or loop), either a specified number of cycles, or continuously. For safety reasons, three modes of recovery from power failure are available. These either automatically restart the program from the beginning, continue it from where it stopped or hold it, waiting for a user restart. Finally, chart recorder, data logging and configuration software for Windows is available as optional extras. This software is designed to operate to program all functions of the controller and to data log the recorded process signals, including chart recorder for on screen viewing of trends, virtual instrument display, on screen alarm displays and remote set point adjustment.

Ordering information: Supplied with white plastic coated wire shelves and self evaporating condensate drip tray. An extensive range of accessories and factory fitted options such as, units with automatic defrost, interior programmable fluorescent/UV lighting, inner perspex door, manual high/low temperature alarms (audible and visible) with safety cutout, built in chart recorder, temperature programmers, temperature controllers with RS485 interface and access ports are available on request. Optional conformance certificate and on site UKAS accreditation of laboratory equipment are available on request, please enquire for further details. Please note; if your application involves Drosophila, a modification for aggressive environments is recommended. Please contact your local VWR office before placing your order.

, ,,							
Model	100	400					
Temperature range (°C)		-10.	+50				
Temperature fluctuation (time) (°C)		±0,1 at 37 °C					
Temperature variation (spatial) (°C)		±0,5 at 37 °C					
Capacity (I)	90	227	290 450				
Convection type		Forced o	onvection				
Shelves supplied (max.)	2/5	3/20	3/	25			
Internal W×D×H (mm)	540×440×490*	550×450×920*	550×450×1170*	550×700×1170*			
External W×D×H (mm)	610×600×810	680×570×1470	680×570×1780	680×860×1780			
Weight (kg)	45	115	120	130			

Type	Pk	Cat. No.
100W standard model	1	390-0081
100WA with dual temperature cycling	1	390-0209
100WNP programmable model	1	390-0082
200W standard model	1	390-0085
200WA with dual temperature cycling	1	390-0535
200WNP programmable model	1	390-0086
300W standard model	1	390-0089
300WA with dual temperature cycling	1	390-0211
300WNP programmable model	1	390-0090
400W standard model	1	390-0096
400WA with dual temperature cycling	1	390-0214
400WNP programmable model	1	390-0097

<sup>\*</sup> Internal dimensions shown above are maximum dimensions, internal usable space will be less due to space occupied by refrigeration system. Please note that with the maximum number of shelves fitted in a cabinet, there is only a 20 mm gap between each shelf.
"A" denotes dual temperature cycling models, "NP" denotes programmable models. The only difference is the programmable controller, all other specifications are the same for all types



of models.



## Cooled incubators, Series 4



### Series 4

LMS Series 4 cooled incubators are temperature controlled cabinets with fan assisted air circulation via a pre-mixing chamber. The units have a stainless steel exterior, stainless steel lined interior with polyurethane foam insulation, and feature a door lock and magnetic door gasket. Corrosion resistant inner chamber is easy to clean, disinfection procedures are detailed in the user manual. Controls are recessed in the control panel, to avoid accidental alteration. Full PID heating control, indicators for mains and high temperature safety cutout. They are ideal for studying growth patterns of plants and insects, BOD tests, seed germination, tissue culture, enzyme testing and fruit fly culture.

- Units feature automatic defrost
- Easy to use controls with digital display of actual temperature (and set point for programmable models)
- Hermetically sealed refrigeration system, and suppressed RF and TV electronics
- Safety features include variable over-temperature alarm, safety cutout preset at 70 °C and refrigeration isolation switch
- Full PID heating control to ensure stable internal temperature

### Series 4 programmable NP models

The programmable option for LMS Series 4 cooled incubators is designed to offer the highest functionality and enables the user to set up and run complex processes relying on accurate temperature control. The programmer function is able to control applications needing set point changes over time, e.g. ramp changes where a gradual rate of change can be set or step changes which are instantaneous. These can be separated by soak periods during which the process is held at a constant value. Each individual time interval of the program, or segment, together with its associated moving set point value, can be stored as a unique program. Via use of "event outputs" control of interior illumination and/or alarm function is also available. At the end of a sequence, a program can be arranged to repeat (or loop), either a specified number of cycles, or continuously. For safety reasons, three modes of recovery from power failure are available. These either automatically restart the program from the beginning, continue it from where it stopped or hold it, waiting for a user restart. Finally, chart recorder, data logging and configuration software for Windows is available as optional extras. This software is designed to operate to program all functions of the controller and to data log the recorded process signals, including chart recorder for on screen viewing of trends, virtual instrument display, on screen alarm displays and remote set point adjustment.

Ordering information: Supplied with white plastic coated wire shelves and self evaporating condensate drip tray. An extensive range of accessories and factory fitted options such as, units with automatic defrost, interior programmable fluorescent/UV lighting, inner perspex door, manual high/low temperature alarms (audible and visible) with safety cutout, built in chart recorder, temperature programmers, temperature controllers with RS485 interface and access ports are available on request. Optional conformance certificate and on site UKAS accreditation of laboratory equipment are available on request, please enquire for further details. Please note; if your application involves Drosophila, a modification for aggressive environments is recommended. Please contact your local VWR office before placing your order.

Model	600	1200			
Temperature range (°C)	-10	+50			
Temperature fluctuation (time) (°C)	±0,1 a	t 37 °C			
Temperature variation (spatial) (°C)	±0,5 at 37 °C				
Capacity (I)	600 1200				
Convection type	Forced convection				
Shelves supplied (max.)	5(24)* 10(48)*				
Internal W×D×H (mm)	540×670×1460 1240×670×1460				
External W×D×H (mm)	690×800×2000 1370×800×2000				
Weight (kg)	160	235			

Туре	Pk	Cat. No.
600W standard model	1	390-0099
600WA with dual temperature cycling	1	390-0168
600 NP programmable model	1	390-0100
1200W standard model	1	390-0083
1200WA with dual temperature cycling	1	390-0210
1200 NP programmable model	1	390-0084

<sup>&</sup>quot;A" denotes dual temperature cycling models, "NP" denotes programmable models. The only difference is the programmable controller, all other specifications are the same for all types of models.

<sup>\*</sup> Please note that with the maximum number of shelves fitted in a cabinet, there is only a 20 mm gap between each shelf.





# Climatic chambers, KBF, KBF P and KBF LQC series Binder







The KBF series is ideal for reliable stability tests and precise maintenance of constant climatic conditions. Constant temperature and humidity values are the outstanding features of this range. These constant climate chambers have a large reserve capacity and a variety of optional features. They also comply with all applicable guidelines with respect to programs and documentation requirements, such as ICH, FDA, GMP and GLP. Units have an inner glass door with smooth inner face and seals, access port with Ø 30 mm silicone plug on the left. MCS controller with colour LCD screen with 25 storable programs each with 100 sections for max. 500 program segments. Integrated electronic chart recorder, variety of options for the graphic display of process parameters and a real time clock. Microprocessor controlled humidification and dehumidification system with a humidity range of 10 - 80% RH, humidity accuracy levels of ±1,5% RH. All models have an independent adjustable temperature safety device Class 3.1 with a visual alarm, which saves the samples and the incubator. Complete safety connection kit for water supply and drainage.

KBF series - for precise simulation of constant climatic conditions.

KBF P series - with ICH-compliant illumination, the one source solution for photostability tests.

KBF LQC series - with ICH-compliant illumination and patented light measurement, Light Quantum Control (LQC).

- Can be operated with tap water with BINDER PURE AQUA SERVICE, a flexible water purification system (optional) or demineralised, deionised, distilled, ultra pure water
- Electronically controlled humidification and dehumidification system with capacitive humidity sensor
- · Environmentally friendly refrigerant R134a
- Suitable for stability tests according to ICH guideline Q1A (R2)
- Illumination is specified for stability in accordance with ICH guideline Q1B, option 2
- Electronically controlled APT.line™ preheating chamber and refrigeration system gives temperature accuracy and reproducible results

**Delivery information:** Supplied with two steel racks (KBF P 720 and KBF LQC 720 have three) and Binder test certificate, Ethernet interface for communication software (APT-COM™ DataControl-System software optional). Castors on units of 240 litres or more. RS422 interface available as an option. Calibration and validation is possible, for details please contact your local VWR sales office.

Model	KBF 115	KBF 240	KBF 720	KBF P 240	KBF P 720	KBF LQC 240	KBF LQC 720			
Temperature range (°C)		070 (without humidity), 1070 (with humidity)								
Temperature fluctuation (time) (°C)				±0,1 at 25°C (60% RH)						
Temperature variation (spatial) (°C)	±0,2 at 25°C (60% RH)	+0 / at /5°( (60% RH)								
Stability RH (%)			±	1,5			±2			
Capacity (I)	102	247	700	247	700	247	700			
Heating method				Forced convection						
Shelves supplied (max.)	2 (5)	2 (9)	2 (15)	2 (9)	3 (12)	2 (9)	3 (12)			
Internal W×D×H (mm)	600×351×483	650×485×785	973×576×1250	650×485×785	973×576×1250	650×485×785	973×576×1250			
External W×D×H (mm)	885×650×1050	930×800×1460	1255×890×1925	930×880×1460	1255×970×1925	930×880×1460	1255×970×1925			
Nominal power consumption (W)	2000	2100	3100	2400	3500	2400	3500			
Weight (kg)	129	184	309	213	374	213	374			

Туре	Pk	Cat. No.
KBF series		
KBF 115	1	390-0461
KBF 240	1	390-0390
KBF 720	1	390-0382
KBF P series		
KBF P 240	1	390-0314
KBF P 720	1	390-0381

Туре		Pk	Cat. No.
KBF LQC series			
KBF LQC 240		1	390-0315
KBF LQC 720		1	390-0380
Description	For	Pk	Cat. No.
Accessories			
Purification system Pure Aqua Service	KBF, KBF P, KBF LQC, KMF, KBWF units	1	390-0327







# Climate chambers, ICH series Memmert



The ICH range of climatic chambers offers rapid and precise temperature control from 10 up to +60 °C with humidification from 10 to 80% RH. These compressor cooled units have stainless steel inner chamber and housing, ensuring long working life and easy cleaning. The ICH models have humidity control, ICH L models feature humidity control and light and ICH C models have humidity and an electronic CO<sub>2</sub> control with automatic zero setting, NDIR measurement system and auto-diagnostic system. All models feature the intuitive control and logging software, AtmoCONTROL, which uses drag and drop symbols to input values. The software allows online monitoring of up to 32 connected appliances and can send an automatic alarm message to one or several email addresses. Complex ramping processes can be programmed quickly and easily. Chambers are ideal for stability tests and storage of pharmaceutical products according to ICH Q1A and Q1B option 2 (requires optional 8000 Lux illumination unit for ICH L), and similar global standards for stability tests of cosmetics and food. ICH C models with CO<sub>2</sub> and humidity control are ideal to carry out tests on building materials or applications in cell biology at below ambient temperatures.

- Intuitive, user friendly TwinDISPLAY with 2 TFT displays. ControlCOCKPIT with USB port. ControlCOCKPIT parameters: Temperature (Celsius or Fahrenheit), fan speed, program time, relative humidity, illumination, time zones and daylight saving time
- Two PT100 sensors in a 4-wire circuit for mutual monitoring, taking over functions in case of an error
- Logged protocol data is displayed on the ControlCOCKPIT (max 10 000 values correspond to approx. 1 week)
- Ethernet interface for reading out the protocol log and for uploading and implementing programs and for online logging
- Multiple over-temperature protection with audible and visual alarm: Electronic temperature monitoring TWW safety device Class 3.3 or TWB safety device Class 2, adjustable on display (independent adjustable over-temperature, which protects the samples and the chamber) and mechanical temperature limiter TB (protection Class 1) according to DIN12880. AutoSAFETY automatically adjusts to the set value within a freely adjustable tolerance range. Setting individual min/max values for over- or under-temperature

**Ordering information:** Supplied without grids or shelves, please order required stainless steel grids, perforated shelves or reinforced grids separately. Range of accessories and factory fitted options such as LED light modules, access ports and interior sockets are available on request. Please contact VWR for further details prior to ordering as these can not be retro-fitted.

Model	ICH110	ICH260	ICH750	ICH110L	ICH260L	ICH750L	ICH110C	ICH260C	ICH750C
Temperature range (°C)	1060 (ICH/ICH L with humidity and light, ICH C with humidity and CO₂) 060 (ICH L/C without humidity) −10+60 (ICH without humidity)								
Temperature fluctuation (time) (°C) Temperature variation (spatial) (°C)		≤±0,3 at 40 °C							
Stability RH (%)		±2							
Capacity (I)	108	256	749	108	256	749	108	256	749
Convection type					Air jacket system				
Shelves supplied (max.)	0 (5)	0 (9)	0 (14)	0 (5)	0 (9)	0 (14)	0 (5)	0 (9)	0 (14)
Internal W×D×H (mm)	560×400×480	640×500×800	1040×600×1200	560×400×480	640×500×800	1040×600×1200	560×400×480	640×500×800	1040×600×1200
External W×D×H (mm)	745×634×1233	824×734×1552	1224×834×1950	745×634×1233	824×734×1552	1224×834×1950	745×634×1233	824×734×1552	1224×834×1950
Power consumption (W)	500	700	1200	500	700	1200	500	700	1200
Weight (kg)	109	153	249	109	153	249	109	153	249
Humidity Range					1080% RH				

Туре	Pk	Cat. No.
ICH models with humidity control		
ICH110	1	390-0663
ICH260	1	390-0666
ICH750	1	390-0669
ICH L models with humidity control and light		
ICH110L with light	1	390-0665
ICH260L with light	1	390-0668
ICH750L with light	1	390-0671

WW Enable Science

Type	Pk	Cat. No.
ICH C models with humidity and CO₂ control		
ICH110C with CO <sub>2</sub> control	1	390-0664
ICH260C with CO₂ control	1	390-0667
ICH750C with CO <sub>2</sub> control	1	390-0670

For details of the range of shelves and grids, please visit www.vwr.com or contact your local VWR sales office.





# Constant climatic chamber with Peltier, HPP series Memmert



The HPP range of climatic chambers offers precise temperature control from 0 up to +70 °C with active humidification and dehumidification from 10 to 90% RH. All models have stainless steel inner chamber and housing, ensuring long working life and easy cleaning. Units have Peltier technology for energy efficient cooling and heating. The Peltier elements can be controlled individually ensuring homogenous temperature and humidity distribution in the chamber. All models feature the intuitive control and logging software, AtmoCONTROL, which uses drag and drop symbols to input values. The software allows online monitoring of up to 32 connected appliances and can send an automatic alarm message to one or several e-mail addresses. Complex ramping processes can be programmed quickly and easily. Chambers are ideal for stability tests and storage in controlled environment and conditioning.

- Intuitive, user friendly TwinDISPLAY with 2 TFT displays. ControlCOCKPIT with USB port. ControlCOCKPIT parameters: Temperature (Celsius or Fahrenheit), program time, relative humidity, illumination, time zones and daylight saving time
- Two PT100 sensors in a 4-wire circuit for mutual monitoring, taking over functions in case of an error
- The HeatBALANCE function allows application specific adjustment of heating power distribution (balance) between the upper and lower heating / cooling groups (Peltier elements)
- Logged protocol data is displayed on the ControlCOCKPIT (max 10 000 values correspond to approx. 1 week)
- Ethernet interface for reading out the protocol log and for uploading and implementing programs and for online logging
- Multiple over-temperature protection with audible and visual alarm selectable on display: Electronic
  temperature monitoring TWW (independent adjustable temperature safety device Class 3.3) or TWB
  adjustable temperature limiter safety device Class 2 which protect the samples and the chamber.
  AutoSAFETY automatically adjusts to the set value within a freely adjustable tolerance range. Setting
  individual min/max values for over- or under-temperature

**Ordering information:** Supplied without grids, please order required stainless steel grids, perforated shelves or reinforced grids separately. Range of accessories and factory fitted options such as LED light modules, access ports and interior sockets are available on request. Please contact VWR for further details prior to ordering as these cannot be retro-fitted.

Model	HPP110	HPP260	HPP750
Temperature range (°C)	070 (without lighting) 1540 (with lighting)		070 (without lighting) (not available with lighting)
Temperature fluctuation (time) (°C)		at 37 °C: ≤±0,2	
Temperature variation (spatial) (°C)		at 37 °C: ≤±0,5	
Capacity (I)	108	256	749
Humidity range (% RH)	1090		
Heating method	Peltier elements		
Shelves supplied (max.)	0 (5) 0 (9) 0 (14)		
Internal W×D×H (mm)	560×400×480 640×500×800		1040×600×1200
External W×D×H (mm)	745×674×867 824×774×1186		1224×874×1726
Power consumption (W)	350 525		1050
Weight (kg)	86 103		234

Туре	Pk	Cat. No.
HPP110	1	390-0660
HPP260	1	390-0661
HPP750	1	390-0662

For details of the range of shelves and grids, please visit www.vwr.com or contact your local VWR sales office.

# Plant growth chambers, KBW series Binder





KBW 400

The KBW series plant growth chambers are precise units for plant cultivation under advanced working conditions. They provide perfect simulation of a wide range of growing environments. The KBW plant growth chambers satisfy all requirements for optimum lighting and temperature conditions, so that culture processes can be defined and reproduced exactly. The design includes two or three variable position daylight cassettes with five daylight luminescence tubes each, which provides homogeneous light distribution. They have an inner glass door, access port with silicone plug Ø30 mm on the left hand side. Units feature an independent adjustable temperature safety device Class 3.1 with a visual alarm, which protects the samples and the incubator. Microprocessor controller with two programs each with 10 sections or, alternatively, switch over to one program with 20 sections. Digital temperature setting with an accuracy of a tenth of a degree, integrated weekly program timer, elapsed time indicator and electronically controlled APT.line™ preheating chamber ensures temperature accuracy and reproducible results.

- Precision and outstanding dynamics
- Even distribution of light on all levels and adjustable fan speed
- Environmentally friendly
- Individual programming and adjustable ramp functions via program editor
- RS 422 interface for APT-COM™ DataControlSystem communication software

**Delivery information:** Supplied with two (or three) stainless steel shelves and Binder test certificate. Calibration and validation is possible, for details please contact your local VWR sales office.

Model	KBW 240	KBW 400	KBW 720	
Temperature range (°C)	070 (without illumination), 560 (with illumination)			
Temperature fluctuation (time) (°C)	±0,1			
Temperature variation (spatial) (°C)	±0,5			
Capacity (I)	247	400 698		
Convection type	Forced convection			
Shelves supplied (max.)	2 (9)	2 (9) 3 (12)		
Weight (kg)	202	267 377		
External W×D×H (mm)	930×800×1460	930×800×1945 1255×890×1925		
Internal W×D×H (mm)	650×485×785	650×485×1270 970×576×1250		
Nominal power consumption (W)	1400	1600 2700		

Type	Pk	Cat. No.
KBW 240	1	390-0330
KBW 400	1	390-0458
KBW 720	1	390-0359



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## Humidity chambers, HCP series Memmert



Humidity chambers which have corrosion resistant, stainless steel inner chamber and housing for long-term climatic tests at constant temperature and humidity. Ideal for food processing, cosmetics, pharmaceutical, biotechnology and electronics industries. Units feature an auto diagnostic system with fault indication for temperature and humidity control. The working chamber is heated on all six sides; this together with electronic humidity control prevents condensation forming in the chamber. Distilled water is supplied from an external 2,5 litre tank by means of a self priming pump. Internal log memory 1024 kB (ring buffer) for all relevant data, capacity is approximately three months at one minute intervals. GLP/GMP compliance is assisted by the USB interface and "Celsius" software for programming and documentation.

- Multifunctional 'Perfect' PID microprocessor controller and digital LED display for all set parameters and seven-day program timer with real time clock
- Integrated timer for temperature profiles of up to 40 ramps, each segment adjustable from 1 min up to 999 h
- Active control for humidifying and dehumidifying (20 95% RH) with digital display of RH, resolution 0,5%, setting accuracy 1%
- Various safety features including independent, digitally adjustable, electronic over-temperature controller TWW protection Class 3.1 (saves the samples and the incubator); audible and visual alarm in case of overor under-temperature, under-humidity, door open or empty water tank
- Inner glass door enables samples to be viewed without affecting chamber temperature and prevents
- For all models, the inner chamber, including the ventilation system, the water trays and all sensors, can be sterilised at 160 °C in a 4 hour program using STERICard

**Ordering information:** Units supplied with software, memory card, calibration certificate (measurements taken at 60 °C). Shelves must be ordered separately. Accessories and factory fitted options, such as RS232, Ethernet and printer interfaces, access ports and documentation are available on request, please your local VWR office for details.

Model	HCP 108	HCP 153	HCP 246	
Temperature range (°C)	Ambient +890 with humidity control; Ambient +8160 without humidity control			
Humidity range (% RH)	20 – 95			
Stability RH (%)		±1,5		
Capacity (I)	108	153 246		
Convection type	Non-turbulent ventilation system			
Shelves supplied (max.)	0 (5)	0 (5) 0 (7)		
Internal W×D×H (mm)	560×400×480	480×500×640 640×600×640		
External W×D×H (mm)	710×550×778	630×650×938 790×750×938		
Nominal power (W)	1000	1500 2000		
Weight (kg)	70	80 110		
Temperature fluctuation (time) (°C)	±0,1			
Temperature variation (spatial) (°C)	<±0,3 at 50 °C			

Description	Pk	Cat. No.
HCP 108	1	466-5053
HCP 153	1	466-5054
HCP 246	1	466-5055

For details of the range of shelves and grids, please visit www.vwr.com or contact your local VWR sales office.



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# CO<sub>2</sub> incubators with hot air sterilisation, CB Series Binder







CO<sub>2</sub> incubators with a built in CO<sub>2</sub> sensor which can be sterilised. Units offer optimum growth conditions for cell cultures and meet demanding requirements for best possible cell growth and maximum sample safety. The ANTI.PLENUM design minimises surfaces due to the seamless, deep-drawn inner chamber without fixtures and featuring an integrated shelf support system. This reduces the risk of contamination, giving less surface area and fewer parts to clean manually and removes the running costs of consumables. Reliable decontamination is provided by the standard-compliant 180 °C hot air sterilisation routine which completely eliminates contaminants and ensures the inner chamber is completely sterilised.

Uniform growth conditions are provided by the VENTAIR™ jacket system, this ensures accurate temperatures, homogeneous temperature distribution and enables fast recovery times. It also minimises thermal degradation of the cell growth due to occasional door openings and the Permadry™ double pan humidication system ensures high humidity and condensate-free interior walls. Units can be stacked using stacking adaptor to save space, have a tightly-fitted inner glass door made of safety glass and 2-point door lock.

- Controller with colour LCD display for simultaneous display of all important parameters (temperature, CO<sub>2</sub> concentration, O<sub>2</sub> concentration, humidity) and push/rotary button for user-friendly input
- CO<sub>2</sub> introduction through Venturi gas mixing nozzle
- Electronic error self-diagnostic system with visual and acoustic alarms, as well as potential free contact for central monitoring
- Independent temperature safety device Class 3.1 (DIN 12880) with visual and audible temperature alarm
- Ethernet interface for APT-COM™ DataControlSystem communication software
- Stable pH values due to short recovery times with drift-free infrared CO<sub>2</sub> measurement system

**Delivery information:** Supplied with perforated stainless steel shelves and Binder test certificate. Calibrations and validations possible. A wide range of options and accessories is available, including partitioned inner glass door and divided shelves), O<sub>2</sub> control, Ethernet interface, gas tank connection kit for CO<sub>2</sub> / O<sub>2</sub> / N<sub>2</sub>, for details please contact your local VWR sales office.

Model	CB 60	CB 160	CB 220	
Temperature range (°C)		Ambient +760		
Temperature fluctuation (time) (°C)		±0,1 at 37 °C		
Temperature variation (spatial) (°C)	±0,3 a	±0,3 at 37 °C		
Capacity (I)	53	150	210	
External W×D×H (mm)	580×550×720	680×720×920	740×715×1070	
Nominal power consumption (W)	1000	1300	1500	
Internal W×D×H (mm)	400×330×400	500×500×600	560×500×750	

Type	Pk	Cat. No.
CB 60	1	390-1000
CB 60, with O <sub>2</sub> control	1	390-1003
CB 60, with gastight glass door and partitioned shelves*	1	390-1012
CB 60, with O <sub>2</sub> control, with gastight glass door and partitioned shelves*	1	390-1013
CB 160	1	390-1004
CB 160, with O₂ control	1	390-1005
CB 160, with gastight glass door and partitioned shelves*	1	390-1008
CB 160, with $O_2$ control, with gastight glass door and partitioned shelves*	1	390-1009
CB 220	1	390-1006
CB 220, with O₂ control	1	390-1007
CB 220, with gastight glass door and partitioned shelves*	1	390-1014
CB 220, with O₂ control, with gastight glass door and partitioned shelves*	1	390-1015

<sup>\*</sup> Units with a gas tight divided inner glass door and divided shelves: CB 60 has 2 shelf levels and 2 regular shelves, CB 160 has 2 shelf levels with 2 divided shelves and CB 220 units have 3 shelf levels with 3 divided shelves.

# CO<sub>2</sub> incubators, C 150 series Binder



The C 150 CO₂ incubator meets the highest standards for cell cultivation. Technically uncompromising, it is ideal for routine cell culture applications. The C 150 is easily accessible, units can be used as stand-alone or stacked. The microprocessor controlled CO₂ incubator has electronically controlled APT.line™ preheating chamber technology, a fan-assisted air jacket system, a gas mixer head, and a drift-free CO₂ infrared absorption measuring system, as well as an automatic diagnostic system with optical and acoustic alarm, all as standard. C 150 incubator has a lockable door with choice of left or right hand side hinges, weldless, deep-drawn inner chamber with integrated shelf support system. Units also have an easy to clean interior without fan or HEPA filter. With zero-voltage relay contact for central monitoring, lockable controller keyboard via three digit password and independent adjustable temperature safety device Class 3.1 with a visual alarm, saves the samples and the incubator (complies with DIN 12880).

- Contamination-free cultivation due to over night hot air sterilisation at 180 °C. Complies with DIN 58947
- Microprocessor control for temperature and CO<sub>2</sub> with various alarm and status displays, built in water condensation control
- 27% less potential contamination surface in the seamless, deep-drawn interior chamber
- Stable pH values due to short recovery times with drift-free FPI infrared CO<sub>2</sub> measurement system
- · Entirely condensation free, even at high humidity

**Delivery information:** Supplied with three perforated stainless steel shelves and Binder test certificate. Calibrations and validations possible, for details please contact your local VWR sales office.

Model	C 150	C 150 (×2)	
Temperature range (°C)	Ambient +750		
Temperature fluctuation (time) (°C)	≤±0,1 at 37 °C		
Temperature variation (spatial) (°C)	≤±0,4 at 37 °C		
Capacity (I)	150	2×150	
Convection type	Air jacket system		
External W×D×H (mm)	680×815×820 680×815×1783		
Nominal power consumption (W)	1400		
Shelves supplied (max.)	3 (6)		
Internal W×D×H (mm)	500×500×600		
Weight (kg)	95 199		

Туре	Pk	Cat. No.
C 150, right-hinged door	1	390-0529
C 150, right-hinged door, stacking set of two incubators, with stacking adapter	1 SET	390-0598
C 150, left-hinged door	1	390-0530
C 150, left-hinged door, stacking set of two incubators, with stacking adapter	1 SET	390-0599



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# CO<sub>2</sub> incubators, INCOmed series Memmert



These three standard units can be upgraded with six additional modules for optimal hygiene, comfort, documentation and programming. The Comfort module has two gas connections with quick release connectors and an automatic switch-over of gas cylinders. The electropolished interior of the Hygiene module is seamlessly welded by laser to ensure minimum contamination. The Communication module includes USB interface, "Celsius" standard software for programming and logging, ring log memory and printer interface. The CO<sub>2</sub> module has an extended CO<sub>2</sub> range from 0 to 20%. The Premium module includes the Comfort, Hygiene, Communication and CO<sub>2</sub> modules. The Humidity module enables active microprocessor controlled humidification and dehumidification (40 - 97% RH). All models have a fully insulated stainless steel door with double locking and four point adjustment and an inner glass door with opening (8 mm Ø) to take gas samples. Units have microprocessor control for temperature and CO<sub>2</sub> with various alarm and status displays, built in water condensation control. Digital (LED) display for all set parameters and digital seven-day program timer with real time clock. All include various safety features including an independent adjustable temperature safety device Class 3.1 with a visual alarm, saves the samples and the incubator, audible and visual alarm in case of over- or under-temperature, over- or under-CO<sub>2</sub>, open door and empty gas cylinder.

- Uniform atmosphere and temperature distribution due to enclosed, non-turbulent ventilation system in chamber
- Hot air sterilisation at 160 °C, four hour program
- Low contamination risk in the seamless, deep-drawn stainless steel inner chamber, which has additional door and rear heating to avoid condensation
- Multifunctional, digital microprocessor PID-controller
- Two Class A PT100 sensors, independently monitoring and taking over the performance at the same temperature value

Ordering information: Supplied without grids or water dish, please order required stainless steel grids, perforated shelves or reinforced grids separately, details of grids can be found at vwr.com. Range of accessories and factory fitted options such as LED light modules, access ports and interior sockets are available on request. Please contact VWR for further details prior to ordering as these cannot be retro-fitted. Fresh water supply module: To be used in combination with humidity module only. Memmert INCOmed CO<sub>2</sub> incubators have a 3 year warranty period as standard. There is an optional additional 1 year extension to that 3 year period, giving 4 years in total.

Model	INC108med	INC153med	INC246med	
Temperature range (°C)	Ambient +850			
Temperature fluctuation (time) (°C)		≤±0,1		
Temperature variation (spatial) (°C)	≤±0,3 at 37 °C			
Capacity (I)	108 153 246			
Convection type	Direct heating			
External W×D×H (mm)	710×550×778 630×650×938 790×750×938			
Nominal power consumption (W)	1000 1500 2000			
Shelves supplied (max.)	0 (4) 0 (6)			
Internal W×D×H (mm)	560×400×480	480×500×640 640×600×640		
Weight (kg)	70 80 110			

Туре	Pk	Cat. No.
INC108med standard	1	390-0672
INC153med standard	1	390-0673
INC246med standard	1	390-0674

For details of the range of shelves and grids, please visit www.vwr.com or contact your local VWR sales office.

## CO<sub>2</sub> incubator, Midi 40 Thermo Scientific



The Midi  $40\ CO_2$  incubator is designed specifically for people who require a compact culturing workspace to handle small workloads, perform personal use applications, or have limited workspace. The unit has the same performance and capabilities as full sized incubators and is a good solution to avoid shared-use environments that can present potential contamination risk through unnecessary sample handling and repeated door openings. The design features a heated inner glass door which prevents condensation, a non-porous silicon gasket maintains the chamber integrity. Units have a weldless stainless steel chamber for easy cleaning. This unit can be stacked because of its reinforced cabinet. The advanced IntrLogic III microprocessor has a bright digital display and intuitive touch pad for simplified entry of temperature,  $CO_2$  and alarm data, with keyed set point switch to prevent unauthorised changes to the operating parameters. Unit has audible and visual alarm functions, precise and reliable  $CO_2$  control featuring an accurate thermal conductivity sensor.

- Cost-effective dedicated incubator space which prevents cross contamination
- Removable water reservoir provides up to 95% RH with short recovery times that promote optimal cell growth
- Even heat distribution to all sides of the chamber for highly efficient heating control
- Standard RS485 signal output

**Delivery information:** Supplied with four perforated stainless steel shelves.

Model	Midi 40
CO₂ range (%)	0 – 20
Temperature range (°C)	Ambient +560
Temperature variation (spatial) (°C)	±0,4 at 37 °C
Humidity (% RH)	95% (37 °C)
Capacity (I)	40
Convection type	Natural convection
External W×D×H (mm)	597×470×465
Shelves supplied (max.)	4 (4)
Internal W×D×H (mm)	355×305×355
Power consumption (W)	460
Weight (kg)	27

Туре	Pk	Cat. No.
Midi 40	1	390-0456



## CO<sub>2</sub> incubators, HERAcell® i series Thermo Scientific



The HERAcell® i series CO₂ incubators provide stable, accurately monitored growth conditions offering excellent protection against contamination for valuable cell and tissue cultures. Extremely short CO₂ and temperature recovery times enhance cell growth. They are available in two practical sizes and two inner chamber designs; non-corrosive stainless steel or 100% antimicrobial solid copper (to verifiably prevent the growth of bacteria and fungi by natural means). The design includes the iCAN™ (Interactive Control Access Navigator) touch screen, which improves monitoring and control, gives quick access to all the important incubation parameters and provides trend analysis for convenient evaluation of the unit's performance. The control is fitted on the door to ensure it is easily accessible and clearly visible. Choice of several languages. Any changes made to the cultivation conditions are displayed directly via protocols and user recordings on the screen. Glass doors have safety interlocks, which ensure that the inner doors are not left open accidentally. Units have a large, directly heated water reservoir as well as up to five times quicker humidity recovery times than conventional incubators with a water tank. Audible and visual alarms when water level

is low. As standard, models are supplied with high quality thermal conductivity (TC) sensors. If the temperature and humidity change frequently (e.g. if the door is opened frequently for access) a dual-beam infrared (IR) sensor is recommended (the IR sensor is unaffected by the effects of humidity and heat) as a factory fitted option. Optional  $O_2$  control unit is also available with two kind of  $O_2$  control ranges and Auto-Cal automatic calibration for applications that require hypoxic or hyperoxic conditions.

- Optimum growth cultures thanks to secure and stable incubation conditions
- Outstanding permanent protection from contamination saves time and prevents the loss of cultures
- Reliable decontamination thanks to fully automatic 90 °C ContraCon routine using moist heat which ensures a simple and reliable cleaning process with proven effectiveness
- Cultures protected from drying out by fast humidity recovery times
- To help protect precious cells, the iONGUARD™ antimicrobial silver matrix, designed to inhibit the growth of biological contaminants on stainless steel chambers, while maintaining their appearance is available. Along with 100% pure copper interiors, there is a choice of the best surface contamination prevention technologies available

**Delivery information:** Supplied with three stainless steel or solid copper shelves. Units are also available with optional  $O_2$  control and with optional IR- $O_2$  sensor instead of the thermal conductivity (TC) sensor. The models with stainless steel chambers can be ordered with iONGUARD<sup>M</sup> antimicrobial silver matrix. Please contact VWR for details.

Model	HERAcell® 150i HERAcell® 240i	
CO₂ range (%)	0 – 20	
Temperature range (°C)	Ambient +355	



Temperature fluctuation (time) (°C)	±0,1 at 37 °C			
Temperature variation (spatial) (°C)	±0,5			
Humidity (% RH)		95 ±3		
CO <sub>2</sub> control (%)	±0,1			
Capacity (I)	150 2×(150) 240			
Convection type	Air jacket system			
External W×D×H (mm)	637×782×867 637×782×1734 780×834×934			
Nominal power consumption (W)	580		640	
Shelves supplied (max.)	3 (10)		3 (12)	
Internal W×D×H (mm)	470×530×607 2×(470×530×607)		607×583×670	
Weight (kg)	70 141 81			

Type	Pk	Cat. No.
HERAcell® 150i, stainless steel inner chamber	1	390-4306
HERAcell® 150i, solid copper inner chamber	1	390-4307
HERAcell® 150i, dual chamber, stainless steel inner chamber, complete with base frame	1	390-4304
HERAcell® 240i, stainless steel inner chamber	1	390-4308
HERAcell® 240i, solid copper inner chamber	1	390-4309

Description	For	Pk	Cat. No.
Factory fitted options for HERAcell® incubators			
Optional 1/2 width shelf in full copper	HERAcell® 240i	1	390-4427
Optional 1/2 width shelf in stainless steel	HERAcell® 240i	1	390-4428
6 compartments with doors	HERAcell® 240i	1	390-4429
IR-CO <sub>2</sub> sensor	HERAcell® 150i, HERAcell® 240i	1	390-1028
O <sub>2</sub> regulator 5 - 90% including 6 compartments with doors	HERAcell® 240i	1	390-1030
3 compartments with doors	HERAcell® 150i	1	390-4322
iONGUARD™ antimicrobial 3-D silver matrix	HERAcell 150i incubators with stainless steel chamber	1	390-0600
iONGUARD™ antimicrobial 3-D silver matrix	HERAcell 240i incubators with stainless steel chamber	1	390-0601
Accessories			
Support frame, 200 mm with castors	HERAcell® 150i	1	390-4432
Support frame, 200 mm without castors	HERAcell® 150i	1	390-4323
Support frame, 200 mm without castors	HERAcell® 240i	1	390-4422
Support frame, 780 mm without castors	HERAcell® 150i	1	390-4324
Support frame, 780 mm without castors	HERAcell® 240i	1	390-4421
Drawer container, 780 mm with 3 drawers	HERAcell® 150i	1	390-4433
Stacking adapter for use with BB16	HERAcell® 150i	1	390-4434
Stacking adapter for HERAcell® i incubators with BB 6220 and B 5060/B 5061	HERAcell® 240i	1	390-4423
Stacking adapter	HERAcell® 240i	1	390-4425
IR-CO <sub>2</sub> gas tester	HERAcell® 150i, HERAcell® 240i	1	390-0457





# CO<sub>2</sub> incubators, Galaxy<sup>®</sup> 170 S



New Brunswick Galaxy S series  $CO_2$  incubators incorporate an easy to use LED display, and a choice of options, allowing for a customisable unit with user friendly control, alarm and monitoring features. The chamber is constructed from seamless stainless steel with easily removable shelves making the chamber easy to clean. The six-sided direct heating profile provides an exceptionally uniform temperature and incubator environment; it guards against wide fluctuations in temperature and  $CO_2$  that can shock cells. Password protection secures settings and alarm set points, and a diagnostic interface shows system parameters and functions. Model 170 S has a sealed inner glass door to allow sample viewing, whilst maintaining environmental integrity and features a 25 mm access port and lockable outer door. HEPA filtration of the gas supply inlets ensures sterility. Audio/visual alarms for temperature,  $CO_2$  and door open. Optional Building Management System (BMS) relay contacts for central monitoring. Directly heated stainless steel humidification pan, for quick recovery times. Units have an RS232 communications port.

- Gentle, fanless convection circulation allows full use of the incubator interior
- IR CO<sub>2</sub> sensor with automatic auto-zero to ensure accurate calibrated measurements
- Galaxy 170 S is available with optional high temperature disinfection (at 120 °C)
- Stackable two units high with optional stacking kits

**Delivery information**: Supplied with perforated stainless steel shelves. Available with optional BioCommand software or Building Management System (BMS) alarm relay contacts, 170 S can have high-temperature disinfection (at 120 °C), or humidity alert and monitoring package. The 170 S can have options including copper chamber and interior and four or eight split inner glass doors. For accessories, including additional shelves, stacking kits and gas management accessories, please contact your local VWR sales office.

CO <sub>2</sub> range (%)	0,2 - 20
Temperature range (°C)	Ambient +450
Temperature fluctuation (time) (°C)	±0,1 at 37
Temperature variation (spatial) (°C)	±0,3
CO, control (%)	±0,1%
Capacity (I)	170

WR Science

Convection type	Direct heating
External W×D×H (mm)	686×678×843
Shelves supplied (max.)	4 (8)
Internal W×D×H (mm)	533×444×691
Weight (kg)	89,9
Temperature control (°C)	±0,1 °C

Type	Pk	Cat. No.
Galaxy 170 S with single door	1	390-0861
Galaxy 170 S with 4 split inner doors	1	390-0862
Galaxy 170 S with single door, includes high temperature disinfection option	1	390-0863
Galaxy 170 S with 4 split inner doors, includes high temperature disinfection option	1	390-0864

Description	For	Pk	Cat. No.
Accessories			
BioCommand SFI data logging software (and one cable)	Galaxy CO <sub>3</sub> incubators	1	390-0509
CO <sub>2</sub> / N <sub>2</sub> in-line pressure regulator	Galaxy CO <sub>2</sub> incubators	1	390-0875
Electronic CO. gas analyser	Galaxy CO. incubators	1	390-0512





## CO<sub>2</sub> incubators, Galaxy® 170 R and 48 R





The fully-featured New Brunswick R series CO<sub>2</sub> incubators incorporate an advanced LCD display, and a full choice of options, allowing for a customisable unit with user friendly control, alarm and monitoring features. The chamber is constructed from seamless stainless steel with easily removable shelves making the chamber easy to clean. The six-sided direct heating profile provides an exceptionally uniform temperature and incubator environment; it guards against wide fluctuations in temperature and CO<sub>2</sub> that can shock cells. The advanced controller and display screen allow for rapid analysis of real time and historical conditions. Data logging capability for 72 hours continuous logging of temperature, alarms, door openings and CO<sub>2</sub>, O<sub>2</sub> and RH if required. Password protection secures settings and alarm set points, and a diagnostic interface shows system parameters and functions. Model 170 R has a sealed inner glass door to allow sample viewing, whilst maintaining environmental integrity. Model 48 R has an integrated and heated outer-door window. Both models feature a 25 mm access port and lockable outer door. HEPA filtration of the gas supply inlets ensures sterility. Audio/visual alarms for temperature, CO<sub>2</sub> and door open (and O<sub>2</sub> level, if O<sub>2</sub> control is selected). Optional Building Management System (BMS) relay contacts for central monitoring. Directly heated stainless steel humidification pan, for quick recovery times. Optional humidity alert and monitoring package with audio/visual alarms when water level is low. Three optional O<sub>2</sub> control ranges: 0,1 to 19% or 1 to 95%. RS232 communications port. Ideal applications include cGMP work, stem cell research, cancer research as well as traditional and non-traditional cell culture.

- Gentle, fanless convection circulation allows full use of the incubator interior
- Advanced controller with LCD interface, up to 72 hours continuous data logging capability and password protection and alarm setpoints
- IR CO<sub>2</sub> sensor with automatic auto-zero to ensure accurate calibrated measurements
- Available with optional high temperature disinfection and O2 control
- Stackable two units high with optional stacking kits

**Delivery information**: Supplied with perforated stainless steel shelves. Both 48 R and 170 R are available with optional  $O_2$  control (either 0,1/1 to 19% or 1 to 95%), BioCommand software, high-temperature disinfection (at 120 °C), Building Management System (BMS) alarm relay contacts or humidity alert and monitoring package. The 170 R can have options including copper chamber and interior, four or eight split inner glass doors and refrigerant free cooling system which allows units to be use between ambient temperature and 10 °C below ambient. The 48 R can be customised with two split inner glass doors. For accessories, including additional shelves, stacking kits and gas management accessories, please contact your local VWR sales office.

Model	Galaxy® 48 R	Galaxy® 170 R
CO₂ range (%)		0,2 - 20
Temperature range (°C)		Ambient +450
Temperature fluctuation (time) (°C)		±0,1 at 37
Temperature variation (spatial) (°C)		±0,3
CO, control (%)	±0,1%	
Capacity (I)	48	170
Convection type	Direct heating	
External W×D×H (mm)	483×475×645	686×678×843
Shelves supplied (max.)	3 (6)	4 (8)
Internal W×D×H (mm)	401×305×401	533×444×691
Weight (kg)	31,8	89,9
Temperature control (°C)	±0,1 °C	

Type	Pk	Cat. No.
48 R models		
Galaxy 48 R	1	390-0871
Galaxy 48 R, includes high temperature disinfection option	1	390-0872
Galaxy 48 R with 1 - 19% O₂ control	1	390-0873
Galaxy 48 R with 1 - 19% O₂ control, includes high temperature disinfection option	1	390-0874
170 R models		
Galaxy 170 R with single door	1	390-0865
Galaxy 170 R with single door, includes high temperature disinfection option	1	390-0866
Galaxy 170 R with 1 - 19% O₂ control	1	390-0869

Туре	Pk	Cat. No.
170 R models		
Galaxy 170 R with 1 - 19% O₂ control, includes high temperature disinfection option	1	390-0870
Galaxy 170 R with 0,1 - 19% O₂ control, includes high temperature disinfection option	1	390-0868
Galaxy 170 R with 1 - 95% O₂ control, includes high temperature disinfection option	1	390-0867

Description	For	Pk	Cat. No.
Accessories			
BioCommand SFI data logging software (and one cable)	Galaxy CO <sub>2</sub> incubators	1	390-0509
CO <sub>2</sub> / N <sub>2</sub> in-line pressure regulator	Galaxy CO, incubators	1	390-0875
Electronic CO, gas analyser	Galaxy CO, incubators	1	390-0512
Lower and upper stacking frame with castors	Galaxy 48 R CO₂ incubators	1	390-0510
Factory fitted oxygen control (1 - 95% range)	Galaxy 48 R CO, incubators	1	390-0338
Factory fitted oxygen control (0,1 - 19% range)	Galaxy 48 R CO, incubators	1	390-0528
Lower and upper stacking frame with castors	Galaxy 170 R/170 S CO₂ incubators	1	390-0513







## CO<sub>2</sub> incubator shaker, S41i New Brunswick



available for remote and historical data logging and report generation.

The S41i  $CO_2$  incubator is specifically designed for non-adherent cells. It combines precise temperature and  $CO_2$  control with an excellent laboratory shaker to give high cell yields and viability. The six-sided direct heating profile provides exceptionally uniform temperature and incubator environment; it guards against wide fluctuations in temperature and  $CO_2$  that can shock cells. The sealed inner and outer doors and advanced PI control maintain temperature accuracy and uniformity while minimising gas consumption.

Units feature a LED display for temperature,  $CO_2$  and shaking speed. The chamber is constructed from seamless stainless steel for easy cleaning, with one removable shelf. The sealed inner glass door allows sample viewing, whilst maintaining environmental integrity. The S41i comes with a 25 mm access port and USB communications port. A high-temperature disinfection cycle protects against bacterial contamination. HEPA filtration of gas supply inlets ensures sterility. Audio/visual alarms for temperature,  $CO_2$  and door open.

- Gentle, fanless convection circulation allows full use of the incubator interior
- Easy to read LED display for temperature, CO2 and shaking speed
- IR CO<sub>2</sub> sensor with automatic auto-zero to ensure accurate calibrated measurements
- Stackable two units high with optional stacking kits
- Four eccentric counterbalanced drives and brushless motor ensure stable, uniform motion
   Integral timer, 0,1 to 99,9 h with automatic switch-off and audible alarm when programme is complete. The chamber conditions are unaffected

**Delivery information:** Supplied with one perforated stainless steel shelf, but without platforms or accessories, required accessories must be ordered separately. For details of accessories, including shaking platforms, additional shelves and stacking kits, please contact your local VWR office. BioCommand® SFI software is

0,2 to 20
Ambient +450
±0,1 at 37 ℃
±0,2 at 37 °C (on platform, with ambient temperature between 18 and 25 °C)
848×685×835
1800
1 (1)
690×445×540
152
612×356
25 - 400 with 25 mm orbit

rype	PK	Cat. No.
S41i CO <sub>2</sub> incubator shaker with high temperature disinfection, 25 mm orbit	1	390-0811
Description	Pk	Cat. No.
Accessories		
Stacking kit	1	390-0810
Additional perforated shelf	1	390-0809
Universal platform (612×356 mm)	1	390-0801
Dedicated platform, 125 ml (612×356 mm)	1	390-0802
Dedicated platform, 250 ml (612×356 mm)	1	390-0803
Dedicated platform, 500 ml (612×356 mm)	1	390-0804
Dedicated platform, 1 litre (612×356 mm)	1	390-0805
Dedicated platform, 2 litre (612×356 mm)	1	390-0806
Dedicated platform, 2,8 litre (612×356 mm)	1	390-0807
Dedicated platform, 4 litre (612×356 mm)	1	390-0808

Note: S41i accommodates a maximum of  $20 \times 125$ ,  $16 \times 250$ ,  $12 \times 500$ ,  $10 \times 1000$ ,  $4 \times 2000$ ,  $3 \times 2800$  or  $3 \times 4000$  ml flasks using the universal platform, and  $32 \times 125$ ,  $25 \times 250$ ,  $15 \times 500$ ,  $11 \times 1000$ ,  $6 \times 2000$ ,  $3 \times 2800$  or  $3 \times 4000$  ml flasks using dedicated platforms.

# Disinfectant for incubators, Incuwater-Clean™ **AppliChem**



The water required to create the humidity is a potential source of contamination which can disperse into the incubator. Incuwater-Clean™ is an effective, non toxic, non volatile disinfectant that does not damage stainless steel or copper trays.

- For the prevention of microbial growth in incubator water baths
- In concentrate format (100x) use 50 ml per 5 litres of water
- Economical replace bath contents with sterile water and dose with Incuwater-Clean™ every 2- 4 weeks

Description	Pk	Cat. No.
Incuwater-Clean™	100 ml	A5219.0100



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- Sampling and sample preparation
  Spectroscopy, chromatography and physical measurement
  Waste and hazard management



# SELECTED FOR YOU

## Petri dishes



## **Transparent PS**

All dishes are manufactured under strict aseptic conditions using on line production and packaging (Class 100). Sterile dishes are gamma irradiated (10 kGy) with proof of sterility and batch number displayed on the box.

- Stable stacking
- Perfectly flat and retain shape up to 55 °C
- Excellent optical quality total transparency
- · Stringent quality control procedures
- Compliant with automatic plate pourers

Certificates on request.

Version	Ø (mm)	Height (mm)	Sterile	Pk	Cat. No.
With 6 vents	55	14,2	-	1.620	391-0865
With 6 vents	55	14,2	+	1.620	391-0895
Without vents	55	14,2	-	1.620	391-0866
Without vents	55	14,2	+	1.620	391-0868
With 3 vents	90	14,2	-	825	391-0439
With 3 vents	90	14,2	+	825	391-0455
With 3 vents, double outer bag	90	14,2	-	825	391-0891
With 3 vents, double outer bag	90	14,2	+	825	391-0892
Without vents	90	14,2	-	825	391-0441
Without vents	90	14,2	+	825	391-0453
Without vents, double outer bag	90	14,2	+	825	391-0894
High, with 3 vents	90	16,2	-	700	391-0440
High, with 3 vents	90	16,2	+	700	391-0459
High, with 1 vent	90	16,2	-	700	391-0443
High, with 1 vent	90	16,2	+	700	391-0458
High, without vents	90	16,2	-	700	391-0442
High, without vents	90	16,2	+	700	391-0457
With 3 vents	140	20,6	-	176	391-1500
With 3 vents	140	20,6	+	176	391-1502
Without vents	140	20,6	-	176	391-1501
Without vents	140	20,6	+	176	391-1503
Contact dish, double outer bag	65	14,5	+	720	391-1504



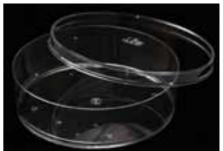
## Petri dishes, Star™Dish Phoenix



710-3505



710-3518



391-0053

## Clear PS

Ideal for colony counting.

- Environmentally friendly manufacturing process uses reduced amounts of plastic
- Sterile and particulate-free

## 90×15 mm dishes

The recessed lid on the nesting ALPINE dish offers excellent stacking stability and saves space. It works with most models of media pouring equipment. The recess on the lid has a smoother bevelled angle allowing the dish to slide easily during automated pouring.

- Vents on the underside of the lid prevent condensation from developing and dripping onto the culture
- Extremely flat bottom allows a reduction in the amount of media required
- Cross ribs on the base make the dish resilient and resistant to warpage when media is poured at a high temperature
- Excellent for performing colony counts, since ribs provide a useful border for making quadrants

## 85×15 mm space and media saving dishes



Due to its smaller diameter, the 85×15 mm dish is perfect for users who want to save on the amount of media poured, as well as on storage space in the refrigerator and incubator.

## 90×15 mm sectional dishes

For simultaneous differential studies of organisms or media in a common environment. Overall costs are reduced by minimising use of dishes, media and space. Versions with 3 or 4 sections have numbered compartments for easy identification.

#### 140×15 mm dished

Ideal for antibiotic susceptibility testing, these dishes accommodate 2 to 3 membrane filters in a single dish. The dish is large enough for bioburden determination and sterility testing of medical devices.

#### 55×15 mm dishas

This dish saves space in refrigerators and incubators, and is ideal when small quantities of media are used. It accommodates single membrane filters for water and pharmaceutical testing.

### Deep dishes

Specifically designed to accommodate more media, these dishes are excellent for mycology, histology and pathology labs, as well as for seed germination. Particularly good if longer culturing periods are required.

### Speciality dishes

The AQUA PLATE is ideal for membrane filtration techniques. It accommodates a 47 mm round membrane filter, used for a variety of water testing techniques, and is best for field sample collection. The tight fitting lid can be easily sealed with tape. The 40×12,5 mm dish is ideal when only a very small sample is required. It is also suitable for use with small filters and in pharmaceutical analysis. The ALPINE FULL SIZE dish is ideal when a larger surface is required for culture and for accommodating antibiotic sensitivity discs.

Version	Ø (mm)	Height (mm)	Packed	Pk	Cat. No.
90×15 mm dishes					
Vithout vents	90	15	25/sleeve	600	710-3516
Nesting ALPINE, stacking with 4 vents	90	15	25/sleeve	600	710-3505
Nesting ALPINE, stacking without vents	90	15	25/sleeve	600	710-3506
Semi-nesting ALPINE, semi-stacking with 4 vents	90	15	25/sleeve	600	710-3507
semi-nesting ALPINE, semi-stacking vithout vents	90	15	25/sleeve	600	710-3508
35×15 mm space and media saving	ı dishes				
pace and media saver, semi- tacking with 3 vents	85	15	25/sleeve	600	710-3511
0×15 mm sectional dishes					
Nith 2 compartments, semi-stacking vith 4 vents		15	25/sleeve	600	710-3509
Nith 3 compartments, semi-stacking vith 4 vents		15	25/sleeve	600	710-3518
Nith 4 compartments, semi-stacking with 4 vents	90	15	25/sleeve	600	710-3519
140×15 mm dishes					
emi-stacking with 6 vents	140	15	20/sleeve	120	710-3521
emi-stacking without vents	140	15	20/sleeve	120	710-0599
emi-stacking with 6 vents, plain base	140	15	20/sleeve	120	391-0426
Semi-stacking without vents, plain pase	140	15	20/sleeve	120	391-0436
Semi-stacking with 6 vents, 20 mm grid on base	140	15	20/sleeve	120	391-0437
Semi-stacking without vents, 20 mm grid on base	140	15	20/sleeve	120	391-0438
55×15 mm dishes					
emi-stacking with 3 vents	55	15	20/sleeve	600	710-3513
emi-stacking without vents	55	15	20/sleeve	600	710-3512
Deep dishes					
emi-stacking with vents	90	20	16/sleeve	384	391-0425
emi-stacking without vents	90	20	16/sleeve	384	710-3510
ligh profile, semi-stacking with ents	90	25	13/sleeve	312	391-0053
emi-stacking with 6 vents	140	20	15/sleeve	90	710-0600
emi-stacking without vents	140	20	15/sleeve	90	710-0601
emi-stacking with 6 vents, plain base	140	20	15/sleeve	90	391-1002
emi-stacking without vents, plain pase	140	20	15/sleeve	90	391-1003
Semi-stacking with 6 vents, 20 mm grid on base	140	20	15/sleeve	90	391-1004
Semi-stacking without vents, 20 mm grid on base	140	20	15/sleeve	90	391-1005
emi-stacking with 6 vents	140	25	12/sleeve	72	710-0602
Semi-stacking without vents	140	25	12/sleeve	72	710-0603

Version	Ø (mm)	Height (mm)	Packed	Pk	Cat. No.
Deep dishes					
Semi-stacking with 6 vents, plain base	140	25	12/sleeve	72	391-0421
Semi-stacking without vents, plain base	140	25	12/sleeve	72	391-0422
Semi-stacking with 6 vents, 20 mm grid on base	140	25	12/sleeve	72	391-0423
Semi-stacking without vents, 20 mm grid on base	140	25	12/sleeve	72	391-0424
Speciality dishes					
ALPINE FULL SIZE, semi-stacking with 4 vents	100	15	22/sleeve	264	710-3503
AQUA PLATE, semi-stacking, without vents	47	12,5	25/sleeve	750	710-3502
Small diameter, stacking with 3 vents	40	12,5	15/sleeve	720	710-3504



# Petri dishes, sterile, Falcon® Corning®



### PS

Manufactured in accordance with the current FDA Quality System.

- Flat, distortion free optics
- Stacking rings allows for easier stacking and handling
- Durable construction for stable dish manipulation

Version	Ø (mm)	Height (mm)	Pk	Cat. No.
Easy-Grip	35	10	500	391-1998
Tight fit lid	50	9	500	391-1997
Standard	60	15	500	391-2266
Standard	100	15	500	391-2002
Standard	150	15	100	391-2003



# Petri dish, Analyslide®



## PS

The Analyslide® Petri dish has a rectangular base and a circular chamber that accepts a 47 mm membrane filter. The sample is protected during microscopic examination, and membrane filters can be stored and protected for reference.

- Rectangular base fits most microscope stages
- Inner cover ring for secure closure
- Clear lid does not interfere with viewing sample
- Frosted area on base permits identification of the sample with marker
- Convenient box simplifies collection and storage of samples

Version	Pk	Cat. No.
Analyslide®	100	516-8020



# PALL Life Sciences

# Petri dishes, sterile



## PS dish, cellulose pad

Ideal for microbiological analysis when performing the membrane filter technique. Petri dishes with absorbent pads can be used with broth media, or users can pour agar into dishes without absorbent pads. Accepts 47 mm membrane filter.

- Gamma irradiated so no Ethylene Oxide residuals to impede microbial growth
- Easy to use, opens easily with one hand, yet closes to a tight seal
- Uses less space on the laboratory bench or in the incubator with easy stacking base

Version	Ø (mm)	Height (mm)	Pk	Cat. No.
Without absorbent pads, bulk pack	50	9	500	516-8021
Without absorbent pads	50	9	100	516-8029
With absorbent pads	50	9	100	516-8032



## Petri dishes, Nunc™ Thermo Scientific



### Optically clear PS

Petri dishes for culturing fungi, bacteria and other microorganisms. Contact dish with printed grid useful for sampling in hospital environments, as well as in food science and the pharmaceutical industry.

- Compatible with automated systems
- · Perform well in automatic dispensers due to complete flatness and uniform height

Version	Ø (mm)	Height (mm)	Sterile	Pk	Cat. No.
Contact dish with grid	67	15	+	396	710-2507

## Petri dishes, Sterilin® Thermo Scientific



Used by microbiologists to culture microorganisms on solid media.

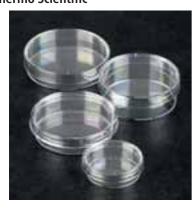
- Available aseptically manufactured under cleanroom conditions (class 7 ISO 14644) to exclude microbiological contamination
- Ideal for use in automatic plate pourers
- Shallow dish is ideal for maximising incubator space

Produced and tested in accordance with BS 611 part 2 standard.

Version	Ø (mm)	Height (mm)	Pk	Cat. No.
90 mm, single vent	89,42	15,9	500	391-2015
90 mm, without vent	89,42	15,7	500	391-0445
90 mm, triple vent	89,42	16,1	500	391-2016

Dimensions shown are for outer Ø base and outer height (mm)

Petri dishes, Sterilin® Thermo Scientific



Ideal for use when savings in media or incubator space are required.

- Aseptically manufactured under cleanroom conditions (class 7 ISO 14644) to exclude microbiological contamination
- 55 mm dish accommodates 47 mm membrane filters making it suitable for water testing
- 50 mm deep form dish is over 20 mm deep and designed for use with liquid media

Version	Ø (mm)	Height (mm)	Pk	Cat. No.
30 mm, triple vent	35,0	11,0	800	391-2019
50 mm, single vent	52,0	14,5	700	391-2020
50 mm, deep form, single vent	50,0	20,3	500	391-2022
55 mm, without vent	55,5	12,0	1.620	391-2041
55 mm, triple vent	55,5	12,0	1.620	391-2042
60 mm, single vent	60.0	15.1	540	391-2021

Dimensions shown are for outer  $\emptyset$  base and outer height (mm)



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## Petri dishes, Sterilin® Thermo Scientific



Ideal for applications where a large surface area and very flat base are required.

- Easy grip ridges on the base to aid individual dish handling
- Aseptically manufactured under cleanroom conditions (class 7 ISO 14644) to exclude microbiological contamination
- Triple vented to aid gaseous exchange
- Ideal for use in automatic plate pourers

Produced and tested in accordance with EN ISO 24998

Version	Ø (mm)	Height (mm)	Pk	Cat. No.
140 mm, triple vent	138,9	21,1	80	391-2028

Dimensions shown are for outer Ø base and outer height (mm)

Petri dishes, square, Sterilin® Thermo Scientific



Non compartmentalised dish is ideal for antibiotic sensitivity testing when a large surface area and very flat base is required.

Compartmentalised dish is ideal for small volume liquid media work or for sample storage. The 25 compartments each have a surface area of 1,8 cm<sup>2</sup> and a capacity of 5 ml. The lid features selectable venting or non venting positions.

 Aseptically manufactured under cleanroom conditions (class 7 ISO 14644) to exclude microbiological contamination

Version	Height (mm)	Pk	Cat. No.
100×100 mm, 25 compartments	20,8	120	391-2017
100×100 mm, without compartments	21,1	120	391-2018

Dimensions shown are for outer Ø base and outer height (mm)

Petri dishes, coloured, Sterilin® Thermo Scientific



## PS, with lid

Colour coded Petri dishes especially suitable for the identification of group work within teaching laboratories.

- Aids ease of identification
- Aseptically manufactured under cleanroom conditions (class 7 ISO14644) to exclude microbiological contamination
- Produced and tested in accordance with the BS611 part 2 standard
- Manufactured using cadmium free non cytotoxic colourants

Version	Ø (mm)	Height (mm)	Sterile	Packed	Pk	Cat. No.
Amber, 3 vents, with lid	90	16,2	-	25 packs with 20 pieces	500	734-0457
Blue, 3 vents, with lid	90	16,2	-	25 packs with 20 pieces	500	734-0458
Red, 3 vents, with lid	90	16,2	-	25 packs with 20 pieces	500	734-0459

## Contact plate, Sterilin® Thermo Scientific



Ideal for use in routine hygiene monitoring of surfaces.

- Concave profile of the dish raises the profile of the media when set giving better contact between the agar bed and surface under test
- Aseptically manufactured under cleanroom conditions (class 7 ISO 14644) to exclude microbiological contamination
- Triple vented to aid gaseous exchange
- Numbered grid on the base facilitates colony counting
- Deep skirted base aids stability when stacked

Conforms to IES 1993 and IPF 1990 standards.

Version	Ø (mm)	Height (mm)	Pk	Cat. No.
Contact plate, 55 mm	67	10,4	300	391-2031

Dimensions shown are for outer Ø base and outer height (mm)

# Petri dishes, Gosselin™ Corning®



### **Transparent PS**

Ideal for food industry laboratories. These dishes are produced in a class 100 (ISO 5) manufacturing environment, ensuring an aseptic product. Product is labelled with a batch number on each carton.

- Excellent optical quality
- Stable stacking due to the stacking ring
- High level of mechanical resistance, will retain shape up to +55 °C

Version	Ø (mm)	Height (mm)	Pk	Cat. No.
Aseptic				
With triple vents	90	16,2	480	391-0242
With single vent	90	14,2	825	391-1506
With single vent	90	16,2	700	391-1509
Without vents	90	14,2	825	391-1507
Sterile				
With triple vents	90	14,2	825	391-0247



# Petri dishes, Steriplan® DURAN Group



## Soda-lime glass

Hydrolytic class III

Ø (mm)	Height (mm)	Pk	Cat. No.
40	12	1	391-2805
60	15	1	391-2810
80	15	1	391-2820
100	10	1	391-2831
100	15	1	391-2830
100	20	1	391-2840
120	20	1	391-2850
150	25	1	391-2860
180	30	1	391-2870
200	30	1	391-2880
200	45	1	391-2890



# Petri dishes, Duroplan® **DURAN Group**



## DURAN®, borosilicate glass, with lid

This plate is used in the pharmaceutical or food processing industry, also in hospital environments for sampling surfaces such as skin, operating tables and work surfaces.

- Base and lid are flat inside and out, free from bubbles and streaks
- Allow even distribution of culture media
- Distortion-free transparency
- Resistant against temperature and chemicals

## DIN 13132

Ø (mm)	Height (mm)	Pk	Cat. No.
54	27	1	391-0810
74	20	1	391-0820
94	15	1	391-0830
94	20	1	391-0840
114	20	1	391-0850
143	26,5	1	391-0860



# Petri dishes, PYREX® SciLabware



## PYREX®, borosilicate glass, with lid

- Chemically resistant
- Specially formed to ensure even wall thickness and consistent optical performance Able to withstand repeated autoclaving

Height (mm)	Pk	Cat. No.
20	10	391-2023
20	10	391-2024
20	10	391-2025
20	10	391-2026
20	10	391-2027
	20 20 20 20 20	20 10 20 10 20 10 20 10 20 10





# **Absorbent pad kits**



One-handed dispensing of cellulose absorbent pads Ø 45.5 mm.

Absorbent pads are ideal for absorbing broth media to culture colonies in accordance with the membrane filter technique.

- Enables user to dispense a clean cellulose pad into a Petri dish whenever needed without touching the nad
- Dispenser kit holds one tube of one hundred absorbent pads (ten tubes included)
- Available non sterile or gamma irradiated (no ethylene oxide residuals to impede microbial growth)

Description	Pk	Cat. No.
Absorbent pad kit, sterile	1.000	516-9012
Absorbent pad kit, non sterile	1.000	516-7850

## Petri dish carrying rack, Poxygrid® Bel-Art Products



## **Epoxy coated steel wire rack**

- Easily loaded and emptied from the top
- For plastic Petri dishes Ø 90 and 100 mm (not suitable for glass Petri dishes)

W×D×H: 108×108×356 mm (1 stack, for 20 dishes)

W×D×H: 343×105×305 mm (3 stacks, for 42 dishes)

Description	Pk	Cat. No.
Petri dish carrying rack, 1 stack	1	391-2011
Petri dish carrying rack, 3 stacks	1	391-2013



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# Inoculating loops and needles



## PS, sterile

The resealable pouch allows loops to be easily accessed any number of times, then reclosed to maintain product integrity. The loops and needles are positioned upside down in the pouch in order to reduce any risk of contamination. Optional pack holder facilitates easy access using one hand, leaving the other hand free to hold a culture plate or tube.

- Colour coded for easy product identification
- Hexagonal loop shaft improves grip, assisting orientation and making diluting and streaking easier
- Gamma sterilised

Packaging: 40 loops/pouch (25 pouches per pack)

**Delivery information:** Supplied with a calibration certificate in each box.

Description	Capacity (µl)	Colour	Packed	Pk	Cat. No.
Loops, rigid	1	Dark Green	40	1.000	612-9360
Loops, rigid	10	Dark Blue	40	1.000	612-9359
Loops, flexible	1	Light Green	40	1.000	612-9361
Loops, flexible	10	Light Blue	40	1.000	612-9362
Needles, Ø 1,45 mm, length 20 cm	-	Purple	40	1.000	612-9366

Description	Colour	Pk	Cat. No.
Accessories			
Holder for loops in resealable packs	Transparent	1	612-9365









# **Inoculating loops and needles**



### PS, sterile

Calibrated disposable inoculating loops made from flexible or rigid plastic to cater to different applications and preferences of microbiologists.

- Colour coded for easy product identification
- Conveniently packaged in anti-roll tubes with push on resealable cap
- Fast, easy and secure access to the loops, without the need for a separate holder
- Loops have an ultra-smooth surface for easy streaking and length of 210 mm

**Delivery information:** Calibration certificate supplied with every pack.

Description	Capacity (μl)	Colour	Packed	Pk	Cat. No.
Loops, rigid	1	Dark Green	50	1.000	612-2494
Loops, rigid	10	Dark Blue	50	1.000	612-2496
Loops, flexible	1	Light Green	50	1.000	612-2497
Loops, flexible	10	Light Blue	50	1.000	612-2498
Needles, Ø 1,45 mm	-	Purple	50	1.000	612-2495

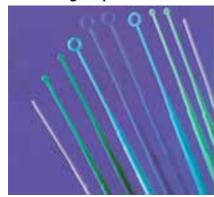








# **Inoculating loops**



## PS, sterile

These loops ensure consistent wetting and complete liquid transfer. Available rigid or flexible, the loops have smooth edges to avoid gouging the surface of the media.

- Gamma sterilised
- Colour coded
- Hexagonal shaft for easy handling

**Delivery information:** Supplied with a calibration certificate in each box.

Description	Capacity (μl)	Colour	Packed	Pk	Cat. No.
Loops, rigid	1	Dark Green	bags of 10	500	612-9351
Loops, rigid	1	Dark Green	bags of 20	1.000	612-9352
Loops, rigid	10	Dark Blue	bags of 10	500	612-9353
Loops, rigid	10	Dark Blue	bags of 20	1.000	612-9354
Loops, flexible	1	Light Green	bags of 10	500	612-9355
Loops, flexible	1	Light Green	bags of 20	1.000	612-9356
Loops, flexible	10	Light Blue	bags of 10	500	612-9357
Loops, flexible	10	Light Blue	bags of 20	1.000	612-9358







# **Inoculating needles**

### PS, sterile

Disposable plastic inoculating needles.

## Packaging: Peelable sachets.

Description	Colour	Ø (mm)	Length (mm)	Pk	Cat. No.
Mini inoculating needles	Blue	1,15	150	500	612-2654
Inoculating needles	Violet	1.45	200	1.000	612-2655



# Inoculating loops, with sphere, Sterilin® Thermo Scientific



Inoculation loop for fixed sample volumes at one end and sphere for streaking at the other.

- Used in microbiological applications for dilution streaking and obtaining isolated colonies
- By turning the square handle 90° after each streaking the sphere provides up to four sterile streaking
- Eliminates the need for flaming
- Sterilised by gamma irradiation

Description	Capacity (µI)	Colour	Packed	Pk	Cat. No.
Inoculating loop with sphere	10	Blue	50 packs of 20	1.000	391-0474
Inoculating loop with sphere	1	Green	50 packs of 20	1.000	391-0473



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# Inoculating needles and loops, Nunc™

## Thermo Scientific



## PS, sterile

Disposable, problem free inoculation with smooth loop surface.

- Meet semi-quantitative standard for handling samples
- Surface treated for enhanced droplet adhesion
- Non toxic

Description	Capacity (µl)	Colour	Packed	Pk	Cat. No.
Loops	1	Transparent	12/sleeve	2.400	710-2508
Loops	1	Transparent	50/sleeve	4.000	734-2138
Loops	10	Blue	12/sleeve	2.400	710-2509
Loops	10	Blue	50/sleeve	4.000	734-2137
Needles	-	Yellow	12/sleeve	2.400	734-2140
Needles	-	Yellow	50/sleeve	4.000	734-2139

# **Inoculating loops, Microstreaker**



## Nickel-chromium wire, plastic handle

Inoculation loop of nickel-chromium wire of not more than 60 mm length, conforming to Howie recommendations.

• Colour coded handle

Description	Capacity (μl)	Pk	Cat. No.
Small, 2,26 mm ID, blue handle	2	5	391-0472
Medium, 2,91 mm ID, green handle	3	5	391-0471
Large, 5,05 mm ID, red handle	10	5	300-0501



# **Inoculating needles**

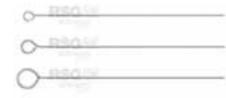
## PS, sterile

Disposable plastic inoculating needles.

- Moderately flexible
- Colour coded plastic

Description	Colour	Packed	Pk	Cat. No.
Needle	Green	peel pouch	1.000	632-0056
Needle	Green	20/bag	1.000	632-0057

## Inoculating loops RSG Solingen



## Nickel-chromium wire 8020

Holder, length 240 mm

These loops are available in a range of sizes and lengths with internal diameter of 1,5, 2,5 or 4 mm. They are heat resistant and can be flame sterilised. Diameter of wire: 0,6 mm.

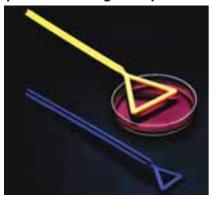
Description	Pk	Cat. No.
Loops, 50 mm, Ø 1,5 mm	10	631-7131
Loops, 50 mm, Ø 2,5 mm	10	631-7132
Loops, 50 mm, Ø 4,0 mm	10	631-7133
Loops, 75 mm, Ø 1,5 mm	10	631-0084
Loops, 75 mm, Ø 2,5 mm	10	631-0085
Loops, 75 mm, Ø 4,0 mm	10	631-0086
Description	Pk	Cat. No.
Inoculating Needles		
Holder, length 170 mm	1	391-0373

391-0374





## Spreaders, triangle shaped



### PP, sterile or non sterile

Convenient and economical, these cell spreaders are designed to simplify bacterial culture work. The foot of the spreader has a completely smooth, rounded surface, free of rough edges and imperfections. It enables even spreading of liquid samples across the surface of agar plates without gouging or cutting the medium.

- Durable enough to be autoclaved and used again
- Width: 30 mm (blue) / 60 mm (yellow)

Description	Colour	Packed	Pk	Cat. No.
Sterile	Blue	Individually wrapped	25	612-2688
Sterile	Yellow	Individually wrapped	25	612-2690
Non sterile	Blue	Bulk	25	612-2687
Non sterile	Yellow	Bulk	25	612-2689





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## Spreaders, L-shaped



#### PS, sterile

The foot of the spreader has a completely smooth, rounded surface, free of rough edges and imperfections. It enables even spreading of liquid samples across the surface of agar plates without gouging or cutting the medium

- Surface treated to enhance adhesion of droplets
- Non toxic
- Gamma irradiated

Dimensions: 135×35 mm

Description	Colour	Packed	Pk	Cat. No.
Spreaders, L-shaped	Blue	individually packed	500	612-1560
Spreaders, L-shaped	Blue	5/bag	1.000	612-1561





## Spreaders, T-shaped

#### PS, sterile

Designed for spreading and dispersing liquids across the surface of agar culture plates. Used for performing bacterial (for example, CFU) plate counts on water, milk and other liquid samples.

- Smooth rounded surfaces to prevent cutting or gouging of agar
- T-shaped to ensure even pressure is applied while spreading

Description	Colour	Packed	Pk	Cat. No.
T-shaped spreader	Blue	1/peel pouch	500	612-2651
T-shaped spreader	Blue	5/peel pouch	1.000	612-2652
T-shaped spreader	Blue	10/peel pouch	1.000	612-2653



## **E-BUSINESS**

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#### **Cotton wool**

#### Absorbent

Description	Pk	Cat. No.
Cotton wool, hospital quality, 500 g roll	1 Roll	118-0300
Cotton wool, BPC (British Pharmacy Code)	500 g	118-0301

#### **Cotton wool**



#### Non absorbent

Description	Pk	Cat. No.
Cotton wool, white	500 g	391-2264

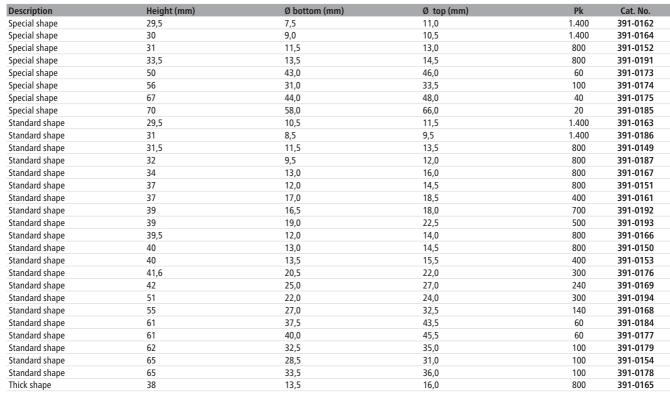


## Stoppers, cellulose



Stoppers for microbiological samples and tissue cultures in test tubes or Erlenmeyer flasks.

- Air permeable
- Autoclavable up to 200 °C
- Will filter bacteria
- · Packed in bags and cardboard boxes for easy handling and space saving
- Available as special shape or as standard shape







## Caps, LABOCAP



#### Aluminium

Without handle. Cap for sterile but not hermetic closing of test tubes and other vessels.

- Made of anodised aluminium with inner stainless steel spring
- Springs clamp against the outer wall of the vessel
- Anodised and coloured
- Autoclavable

Description	For Ø ext. (mm)	Pk	Cat. No.
LABOCAP, silver	12-13	10	391-5901
LABOCAP, red	12-13	10	391-5903
LABOCAP, blue	12-13	10	391-5902
LABOCAP, silver	15-16	10	391-5907
LABOCAP, silver	17-18	10	391-5910
LABOCAP, red	17-18	10	391-5912
LABOCAP, blue	17-18	10	391-5911
LABOCAP, silver	19-20	10	391-5913
LABOCAP, red	14-15	10	391-5906



## Caps, LABOCAP



#### Aluminium

With handle. Cap for sterile but not hermetic closing of test tubes and other vessels.

- Made of anodised aluminium with inner stainless steel spring
- Springs clamp against the outer wall of the vessel
- Anodised and coloured
- Autoclavable

Description	For Ø ext. (mm)	Pk	Cat. No.
LABOCAP, silver	15-16	10	391-0094
LABOCAP, silver	17-18	10	391-5930
LABOCAP, red	17-18	10	391-5932
LABOCAP, blue	17-18	10	391-5931



## Caps, ERLENMEYER-CAP



## Aluminium

- Anodised, blue coloured
- Springs made of chromium-nickel steel
- Springs clamp against the outer wall of the vessel
  Autoclavable

Colour	For Ø (mm)	Pk	Cat. No.
Blue	37-39	10	391-0951







## Cell culture flasks, Standard Line



#### Crystal clear virgin PS, sterile and certified non pyrogenic

VWR Collection flasks are vacuum gas plasma treated for consistent cell attachment and growth. Vented caps incorporate a 0,22 µm hydrophobic filter to allow gas exchange and minimise risk of contamination. Plug seal caps can be used in closed systems (providing a liquid and gas-tight seal) or used in an open system (simply unscrew the cap one quarter of a turn).

- Angled neck design offers good pipette and cell scraper access
- Upper triangular and wide base shape provide better stability
- Volume graduations on both sides with special writing area
- Choice of vented or plug seal caps

Manufactured in 100 000 grade cleanroom environment.

**Packaging:** Packed in resealable self-standing bags allowing flasks to remain upright, lowering the risk of contamination.

Capacity (ml)	Сар	Culture area (cm²)	Packed	Pk	Cat. No.
25	Plug seal	12,5	10/bag	200	734-2310
25	Vented	12,5	10/bag	200	734-2309
50	Plug seal	25	10/bag	200	734-2312
50	Vented	25	10/bag	200	734-2311
250	Plug seal	75	5/bag	100	734-2314
250	Vented	75	5/bag	100	734-2313
600	Plug seal	182,5	5/bag	40	734-2316
600	Vented	182,5	5/bag	40	734-2315
850	Plug seal	300	3/bag	18	734-2601
850	Vented	300	3/hag	18	734-2600



## Cell culture flasks, Falcon® Corning®



### PS, tissue culture-treated, sterile, non-pyrogenic

Vacuum gas plasma tissue culture treatment ensures consistent cell attachment, spreading and growth.

- Easy to read printed volumetric graduations, and writing patch
- Vented caps incorporate a 0,2 µm hydrophobic membrane
- Convenient, peel-open, medical-style packaging ensures flask sterility is maintained

Capacity (ml)	Сар	Growth area (cm²)	Neck	Pk	Cat. No.
25	Vented	12,5	canted	100	734-0043
25	Plug seal	12,5	canted	100	734-0010
50	Vented	25	canted	100	734-0044
50	Plug seal	25	canted	200	734-0009
70	Vented	25	canted	100	734-0045
70	Plug seal	25	canted	200	734-0031
250	Vented	75	straight	100	734-0046
250	Plug seal	75	straight	100	734-0012
250	Vented	75	canted	60	734-0050
250	Plug seal	75	canted	60	734-0049
750	Vented	175	straight	40	734-0047
750	Vented	175*	straight	40	734-0964
750	Plug seal	175	straight	40	734-0014
600	Vented	150	canted	40	734-0267
600	Plug seal	150	canted	40	734-0266
800	Vented	225	canted	30	734-0957
800	Plug seal	225	canted	30	734-1031

Description	Pk	Cat. No.
Vented caps for Falcon® flasks		
Vented caps for 25 cm² flasks	100	734-1066
Vented caps for 75 cm² flasks	100	734-1067
Vented caps for 175 cm² flasks	50	734-1068

\* Barcoded (robotics/automation compatible) Note: Culture area and capacity are nominal



## Cell culture flasks, non treated, Nunc™ Thermo Scientific



### PS flask, HDPE filter cap, sterile, non-pyrogenic

For culturing cells that do not require a treated surface. Ideal for hybridoma and suspension cultures.

- Canted neck flask for better accessibility
- Distinctive white cap for easy identification
- Extra caps provided in each carton

Capacity (ml)	Neck	Recommended working volume (ml)	Pk	Cat. No.
70	Canted	7	200	734-2104
260	Canted	30	100	734-2069
645	Canted	55	30	734-1190



# Cell culture flasks Corning®







### Optically clear PS

Available with a choice of treated surface. Corning® CellBIND® surface increases surface wetability for more even and consistent cell attachment. Ultra-Low Attachment flasks feature a covalently bound hydrogel layer that minimises cell attachment, protein absorption and cellular activation.

- Treated for optimal cell attachment
- Printed with lot numbers for ease in traceability
- Sterilised by gamma radiation
- Certified non pyrogenic

Сар	Description	Neck	Pk	Cat. No.
25 cm <sup>2</sup> growth area flasks				
Phenolic	Triangular, TC treated	Angled	500	734-1531
Vented	Triangular, TC treated	Angled	200	734-1532
Vented	Rectangular, CellBIND® surface	Canted	200	734-0090
Vented	Rectangular, Ultra-Low Attachment	Canted	24	734-4140
Plug seal	Rectangular, TC treated	Canted	500	734-1700
Phenolic	Rectangular, TC treated	Canted	500	734-1706
Vented	Rectangular, TC treated	Canted	200	734-1712
Vented	Rectangular, non-treated	Canted	200	734-2272
75 cm <sup>2</sup> growth area flasks				
Phenolic	Modified triangular	Straight	100	734-1543
Vented	Modified triangular	Straight	100	734-1544
Vented	Rectangular, CellBIND® surface	Canted	100	734-0091
Vented	Rectangular, Ultra-Low Attachment	Canted	24	734-4139
Vented	Rectangular TC treated	Canted	100	734-1713

Plug sea	Сар	Description	Neck	Pk	Cat. No.
Plug seal   Rectangular, TC treated   Canted   100   734-1715     Phenolic   Rectangular, TC treated   Canted   100   734-1716     Vertited   Rectangular, TC treated   Canted   100   734-17273     Phenolic   Rectangular, TC treated   Canted   100   734-2273     Phenolic   Cell culture vessel for manual use, TC treated, with barcode   Cell culture vessel for manual use, TC treated, with parcode   Cell culture vessel for manual use, TC treated, with parcode   Cell culture vessel for manual use, TC treated, with parcode   Cell culture vessel for manual use, TC treated, with parcode   Cell culture vessel for manual use, TC treated, with parcode   Cell culture vessel for manual use, TC treated   Cented   Cen	75 cm² growth area flasks				
Vented         Rectangular, non-treated         Canted         100         734-2273           92,6 cm² growth area RoboFlask™ vessels         Cell culture vessel for manual use, TC treated, with barcode         Straight         50         734-4041           Flat (without septum)         Cell culture vessel for manual use, TC treated, with barcode         Straight         100         734-4045           Septum         Cell culture vessel for manual use, TC treated, with barcode         Straight         50         734-4044           Septum         Cell culture vessel for manual use, TC treated, with barcode         Straight         50         734-4045           Septum         Cell culture vessel for manual use, TC treated, with barcode         Straight         50         734-4045           Septum         Cell culture vessel for manual use, TC treated, with barcode         Straight         50         734-4045           Septum         Cell culture vessel for manual use, TC treated, with barcode         Straight         50         734-4044           Septum         Cell culture vessel for manual use, TC treated         Straight         50         734-4044           Septum         Cell culture vessel for manual use, TC treated         Straight         50         734-4044           Septum         Cell culture vessel for automation, CellBIND* surface         Canted	Plug seal	Rectangular, TC treated	Canted	100	734-1715
### Paramanual use, TC treated, with barcode	Phenolic	Rectangular, TC treated	Canted	100	734-1716
Flat (without septum)  Flat (without septum)  Cell culture vessel for manual use, TC treated, with barcode  Cell culture vessel for manual use, TC treated, with barcode  Septum  Cell culture vessel for automation, CellBIND® surface, with barcode  Cell culture vessel for manual use, TC treated, with barcode  Cell culture vessel for manual use, TC treated, with barcode  Cell culture vessel for manual use, TC treated, with barcode  Cell culture vessel for manual use, TC treated, with barcode  Cell culture vessel for manual use, TC treated, with barcode  Cell culture vessel for manual use, TC treated, with barcode  Cell culture vessel for manual use, TC treated, with barcode  Cell culture vessel for manual use, TC treated, with barcode  Cell culture vessel for manual use, TC treated, Straight  Cell culture vessel for manual use, TC treated, Straight  Cell culture vessel for manual use, TC treated, Straight  Cell culture vessel for manual use, TC treated, Straight  Cell culture vessel for manual use, TC treated, Straight  Cell culture vessel for manual use, TC treated, Straight  Cell culture vessel for manual use, TC treated, Straight  Cell culture vessel for manual use, TC treated, Straight  Cell culture vessel for manual use, TC treated, Straight  Cell culture vessel for manual use, TC treated, Canted  Cante	Vented	Rectangular, non-treated	Canted	100	734-2273
Fact (without septum)	92,6 cm² growth area RoboFlask™ vessels	<u> </u>			
Septum   Cell culture vessel for automation, CellBIND® surface, with barcode surface, with barcode surface, with barcode   Straight   100   734-4045	Flat (without septum)		Straight	50	734-4041
Septum         surface, with barcode         Straight         100         734-4042           Septum         Cell culture vessel for manual use, TC treated, with barcode         Straight         50         734-4044           Septum         Cell culture vessel for manual use, TC treated, with barcode         100         734-4045           100 cm² growth area low profile flasks         Wented         Low profile, TC treated         Canted         60         734-4047           Vented         Low profile, TC treated         Canted         60         734-4047           Vented         Low profile, TC treated         Canted         60         734-4047           Vented         Rectangular, TC treated         Canted         50         734-1717           Phenolic         Rectangular, TC treated         Canted         50         734-1717           Phenolic         Rectangular, TC treated         Canted         50         734-1717           Vented         Rectangular, TC treated         Canted         50         734-1717           Vented         Rectangular, TC treated         Canted         25         734-1719           Vented         Traditional, TC treated         Canted         25         734-1521           Vented         Traditional, TC treated	Flat (without septum)		Straight	100	734-4046
Septum         with barcode         Straight         50         7,34-4044           Septum         Cell culture vessel for manual use, TC treated, with barcode         Straight         100         734-4045           100 cm² growth area low profile flasks         Wented         Low profile, CellBIND® surface         Canted         60         734-4014           150 cm² growth area flasks         Low profile, CellBIND® surface         Canted         50         734-1717           Plug seal         Rectangular, TC treated         Canted         50         734-1718           Phenolic         Rectangular, CellBIND® surface         Canted         50         734-1718           Vented         Rectangular, CellBIND® surface         Canted         50         734-1718           Vented         Rectangular, TC treated         Canted         50         734-1719           Vented         Rectangular, To treated         Canted         25         734-1510           Vented         Traditional, TC treated         Canted         25         734-1541           175 cm² growth area flasks         Traditional, TC treated         Canted         25         734-1540           Vented         Rectangular, CellBIND® surface         Angled         50         734-122           Phenolic	Septum		Straight	100	734-4042
Septum         with barcode         Straight         100 m² growth area low profile flasks           Vented         Low profile, CellBIND® surface         Canted         60         734-4047           Vented         Low profile, TC treated         Canted         50         734-1118           19 Lug seal         Rectangular, TC treated         Canted         50         734-1718           Vented         Rectangular, TC treated         Canted         50         734-1718           Vented         Rectangular, TC treated         Canted         50         734-1718           Vented         Rectangular, TC treated         Canted         50         734-1719           Vented         Rectangular, TC treated         Canted         25         734-1204           Vented         Taditional, TC treated         Canted         25         734-1540           Vented         Rectangular, CellBIND® surface         Angled         50         734-1206           Phenolic         Rectangular, TC treated         Angled         50         734-1224           Vented <td>Septum</td> <td>with barcode</td> <td>Straight</td> <td>50</td> <td>734-4044</td>	Septum	with barcode	Straight	50	734-4044
Vented         Low profile, CellBIND® surface         Canted         60         734-4047           Vented         Low profile, Tc treated         Canted         60         734-4141           150 cm² growth area flasks         Plug seal         Rectangular, Tc treated         Canted         50         734-1717           Phenolic         Rectangular, CellBIND® surface         Canted         50         734-1718           Vented         Rectangular, FC treated         Canted         50         734-1719           Vented         Rectangular, FC treated         Canted         50         734-1719           Vented         Rectangular, To treated         Canted         50         734-1724           Vented         Rectangular, To treated         Canted         50         734-1244           Vented         Traditional, TC treated         Canted         25         734-1540           Vented         Traditional, TC treated         Canted         25         734-1540           Vented         Rectangular, CellBIND® surface         Angled         50         734-126           Phenolic         Rectangular, TC treated         Angled         50         734-122           Vented         Rectangular, TC treated, with barcode         Angled         50	Septum	· · · · · · · · · · · · · · · · · · ·	Straight	100	734-4045
Vented         Low profile, TC treated         Canted         60         734-4114           150 cm² growth area flasks         Vented         Sectangular, TC treated         Canted         50         734-1717           Plus seal         Rectangular, TC treated         Canted         50         734-1718           Vented         Rectangular, CellBIND® surface         Canted         50         734-1719           Vented         Rectangular, TC treated         Canted         50         734-1719           Vented         Rectangular, TC treated         Canted         50         734-1219           Vented         Rectangular, TC treated         Canted         50         734-1219           Vented         Traditional, TC treated         Canted         25         734-1540           Vented         Traditional, TC treated         Canted         25         734-1540           Vented         Traditional, TC treated         Angled         50         734-120           Phenolic         Rectangular, CellBIND® surface         Angled         50         734-120           Phenolic         Rectangular, TC treated         Angled         50         734-172           Vented         Rectangular, TC treated, with barcode         Angled         50	100 cm <sup>2</sup> growth area low profile flasks				
150 cm² growth area flasks   Plug seal   Rectangular, TC treated   Canted   50   734-1717   Phenolic   Rectangular, TC treated   Canted   50   734-1718   Phenolic   Rectangular, CE lleBIND® surface   Canted   50   734-1719   Vented   Rectangular, TC treated   Canted   50   734-1719   Vented   Rectangular, TC treated   Canted   50   734-1719   Vented   Rectangular, non-treated   Canted   50   734-1719   Vented   Rectangular, non-treated   Canted   50   734-1719   Vented   Rectangular, non-treated   Canted   25   734-1540   Vented   Traditional, TC treated   Canted   25   734-1540   Vented   Traditional, TC treated   Canted   25   734-1540   Vented   Traditional, TC treated   Canted   25   734-1541   T75 cm² growth area flasks   Traditional, TC treated   Angled   50   734-1726   Phenolic   Rectangular, TC treated   Angled   50   734-1726   Phenolic   Rectangular, TC treated   Angled   50   734-1726   Phenolic   Rectangular, TC treated   Angled   50   734-1722   Vented   Rectangular, TC treated   Angled   50   734-1723   Vented   Rectangular, TC treated   Angled   50   734-1723   Vented   Rectangular, TC treated, with barcode   Angled   50   734-1723   Vented   Rectangular, TC treated, with barcode   Angled   84   734-1733   Vented   Rectangular, TC treated, with barcode   Angled   84   734-1733   Vented   Rectangular, TC treated, with barcode   Angled   84   734-1734   Vented   Rectangular, TC treated, with barcode   Angled   84   734-1734   Vented   Rectangular, TC treated   Angled   50   734-275   Vented   Rectangular, TC treated   Angled   24   734-1519   Vented   Rectangular, TC treated   Angled   25   734-1519   Vented   Rectangular, TC treated   Angled   27   734-1519   Vented   Rectangular, TC treated   Angled	Vented	Low profile, CellBIND® surface	Canted	60	734-4047
Plug seal         Rectangular, TC treated         Canted         50         734-1717           Phenolic         Rectangular, TC treated         Canted         50         734-1718           Vented         Rectangular, CellBIND® surface         Canted         50         734-1092           Vented         Rectangular, TC treated         Canted         50         734-1719           Vented         Rectangular, non-treated         Canted         50         734-1724           162 cm² growth area flasks           Phenolic         Traditional, TC treated         Canted         25         734-1540           Vented         Traditional, TC treated         Canted         25         734-1540           Vented         Rectangular, CellBIND® surface         Angled         50         734-126           Phenolic         Rectangular, TC treated         Angled         50         734-1726           Plug seal         Rectangular, TC treated         Angled         50         734-1726           Plug seal         Rectangular, TC treated, with barcode         Angled         50         734-1723           Vented         Rectangular, TC treated, with barcode         Angled         30         734-1214		Low profile, TC treated	Canted	60	734-4141
Phenolic         Rectangular, TC treated         Canted         50         734-1718           Vented         Rectangular, CellBIND® surface         Canted         50         734-0992           Vented         Rectangular, TC treated         Canted         50         734-1719           Vented         Rectangular, non-treated         Canted         50         734-1274           162 cm² growth area flasks         **Phenolic         Traditional, TC treated         Canted         25         734-1540           Vented         Rectangular, CellBIND® surface         Angled         50         734-126           Phenolic         Rectangular, CellBIND® surface         Angled         50         734-126           Plug seal         Rectangular, CellBIND® surface         Angled         50         734-1723           Vented         Rectangular, TC treated, with barcode         Angled         50         734-1733           Vented         Rectangular, TC treated, with barcode	-				
Vented         Rectangular, CellBIND® surface         Canted         50         734-0092           Vented         Rectangular, TC treated         Canted         50         734-1719           Vented         Rectangular, non-treated         Canted         50         734-2274           Vented         Traditional, TC treated         Canted         25         734-1540           Vented         Traditional, TC treated         Canted         25         734-1540           Vented         Traditional, TC treated         Canted         25         734-1540           Vented         Traditional, TC treated         Angled         50         734-126           Phenolic         Rectangular, CellBIND® surface         Angled         50         734-126           Phenolic         Rectangular, TC treated         Angled         50         734-1726           Plug seal         Rectangular, CellBIND® surface         Angled         50         734-1722           Vented         Rectangular, TC treated         Angled         50         734-1723           Vented         Rectangular, TC treated, with barcode         Angled         84         734-1714           Vented         Rectangular, TellBIND® surface, with barcode         Angled         84         734-	Plug seal	<u> </u>	Canted	50	734-1717
Vented         Rectangular, TC treated         Canted         50         734-1719           Vented         Rectangular, non-treated         Canted         50         734-2274           162 cm² growth area flasks           Fhenolic         Traditional, TC treated         Canted         25         734-1540           Phenolic         Rectangular, CellBIND® surface         Angled         50         734-1206           Phenolic         Rectangular, TC treated         Angled         50         734-1206           Phenolic         Rectangular, TC treated         Angled         50         734-1206           Phenolic         Rectangular, TC treated         Angled         50         734-1206           Plug seal         Rectangular, TC treated         Angled         50         734-1722           Vented         Rectangular, TC treated         Angled         50         734-1723           Vented         Rectangular, TC treated, with barcode         Angled         84         734-1733           Vented         Rectangular, TC treated, with barcode         Angled         84         734-1214           Vented         Rectangular, TC treated         Angled	Phenolic		Canted	50	734-1718
Vented         Rectangular, non-treated         Canted         50         734-2274           162 cm² growth area flasks         Flenolic         Traditional, TC treated         Canted         25         734-1540           Vented         Traditional, TC treated         Canted         25         734-1541           175 cm² growth area flasks         Vented         Rectangular, CellBIND® surface         Angled         50         734-1206           Phenolic         Rectangular, CellBIND® surface         Angled         50         734-1726           Phenolic         Rectangular, TC treated         Angled         50         734-1726           Phenolic         Rectangular, TC treated         Angled         50         734-1726           Phenolic         Rectangular, CellBIND® surface         Angled         50         734-1726           Phenolic         Rectangular, CellBIND® surface         Angled         50         734-1726           Vented         Rectangular, TC treated, with barcode         Angled         84         734-1733           Vented         Rectangular, CellBIND® surface, with barcode         Angled         84         734-1214           Vented         Rectangular, TC treated         Angled         24         734-1519	Vented	Rectangular, CellBIND® surface	Canted	50	734-0092
162 cm² growth area flasksPhenolicTraditional, TC treatedCanted25734-1540VentedTraditional, TC treatedCanted25734-1541175 cm² growth area flasksTraditional, TC treatedPhenolicRectangular, CellBIND® surfaceAngled50734-1206PhenolicRectangular, TC treatedAngled50734-1726Plug sealRectangular, TC treatedAngled50734-1726VentedRectangular, CellBIND® surfaceAngled50734-1723VentedRectangular, TC treated, with barcodeAngled50734-1723VentedRectangular, TC treated, with barcodeAngled50734-1723VentedRectangular, CellBIND® surface, with barcodeAngled84734-1733VentedRectangular, CellBIND® surface, with barcodeAngled84734-1214VentedRectangular, TC treatedAngled50734-2275225 cm² growth area flasksTraditional, TC treatedCanted24734-1519Plug sealTraditional, TC treatedAngled25734-1724VentedRectangular, TC treatedCanted24734-1519VentedRectangular, TC treatedCanted25734-1724VentedRectangular, TC treatedCanted24734-1519VentedRectangular, TC treatedAngled25734-1724VentedRectangular, TC treatedAngled25734-1724<	Vented	Rectangular, TC treated	Canted	50	734-1719
Phenolic         Traditional, TC treated         Canted         25         734-1540           Vented         Traditional, TC treated         Canted         25         734-1541           175 cm² growth area flasks           Phenolic         Rectangular, CellBIND® surface         Angled         50         734-1206           Phenolic         Rectangular, TC treated         Angled         50         734-1726           Plug seal         Rectangular, CellBIND® surface         Angled         50         734-1722           Vented         Rectangular, CellBIND® surface         Angled         50         734-1722           Vented         Rectangular, TC treated, with barcode         Angled         50         734-1723           Vented         Rectangular, CellBIND® surface, with barcode         Angled         84         734-1713           Vented         Rectangular, CellBIND® surface, with barcode         Angled         84         734-1214           Vented         Rectangular, TC treated         Angled         84         734-1214           Vented         Rectangular, TC treated         Canted         24         734-1519           Plug seal         Traditional, TC treated         Angled         25         734-1724           Vented <td>Vented</td> <td>Rectangular, non-treated</td> <td>Canted</td> <td>50</td> <td>734-2274</td>	Vented	Rectangular, non-treated	Canted	50	734-2274
VentedTraditional, TC treatedCanted25734-1541175 cm² growth area flasksPhenolicRectangular, CellBIND® surfaceAngled50734-1206PhenolicRectangular, TC treatedAngled50734-1726Plug sealRectangular, TC treatedAngled50734-1722VentedRectangular, CellBIND® surfaceAngled50734-1722VentedRectangular, TC treatedAngled50734-1723VentedRectangular, TC treated, with barcodeAngled84734-1733VentedRectangular, CellBIND® surface, with barcodeAngled84734-1214VentedRectangular, non-treatedAngled50734-2275225 cm² growth area flasksTraditional, TC treatedCanted24734-1519Plug sealRectangular, TC treatedAngled25734-1724VentedRectangular, TC treatedAngled25734-1724VentedRectangular, TC treatedCanted24734-1520VentedRectangular, TC treatedCanted24734-1520VentedRectangular, TC treatedCanted24734-1520VentedRectangular, TC treatedCanted24734-1520VentedRectangular, TC treatedCanted24734-1520VentedRectangular, TC treatedCantedAngled25734-0094	162 cm² growth area flasks				
Phenolic Rectangular, CellBIND® surface Angled 50 734-1206 Phenolic Rectangular, TC treated Angled 50 734-1726 Plug seal Rectangular, TC treated Angled 50 734-1722 Vented Rectangular, TC treated Angled 50 734-1722 Vented Rectangular, TC treated Angled 50 734-1722 Vented Rectangular, TC treated Angled 50 734-1723 Vented Rectangular, TC treated Angled 50 734-1723 Vented Rectangular, TC treated, with barcode Angled 50 734-1723 Vented Rectangular, TC treated, with barcode Angled 84 734-1733 Vented Rectangular, CellBIND® surface, with barcode Angled 50 734-1214 Vented Rectangular, non-treated Angled 50 734-2275  225 cm² growth area flasks Phenolic Rectangular, TC treated Angled 24 734-1519 Plug seal Traditional, TC treated Angled 25 734-1724 Vented Rectangular, TC treated Angled 25 734-1724 Vented Rectangular, TC treated Angled 25 734-1520 Vented Rectangular, TC treated Angled 25 734-1094	Phenolic	Traditional, TC treated	Canted	25	734-1540
PhenolicRectangular, CellBIND* surfaceAngled50734-1206PhenolicRectangular, TC treatedAngled50734-1726Plug sealRectangular, TC treatedAngled50734-1722VentedRectangular, CellBIND* surfaceAngled50734-0093VentedRectangular, TC treatedAngled50734-1723VentedRectangular, TC treated, with barcodeAngled84734-1733VentedRectangular, CellBIND* surface, with barcodeAngled84734-1214VentedRectangular, non-treatedAngled84734-1214225 cm² growth area flasksPhenolicRectangular, TC treatedCanted24734-1519Plug sealTraditional, TC treatedAngled25734-1724VentedRectangular, TC treatedCanted24734-1520VentedRectangular, TC treatedCanted25734-1094VentedTraditional, TC treatedCanted24734-1520	Vented	Traditional, TC treated	Canted	25	734-1541
Phenolic Rectangular, TC treated Angled 50 734-1726 Plug seal Rectangular, TC treated Angled 50 734-1722 Vented Rectangular, CellBIND® surface Angled 50 734-093 Vented Rectangular, TC treated Angled 50 734-1723 Vented Rectangular, TC treated Angled 50 734-1723 Vented Rectangular, TC treated, with barcode Angled 84 734-1733 Vented Rectangular, CellBIND® surface, with barcode Angled 84 734-1214 Vented Rectangular, non-treated Angled 50 734-2275  225 cm² growth area flasks Phenolic Rectangular, TC treated Angled 24 734-1519 Plug seal Traditional, TC treated Angled 25 734-1724 Vented Rectangular, TC treated Angled 25 734-1724 Vented Rectangular, TC treated Angled 25 734-1520 Vented Rectangular, TC treated Angled 25 734-1094 Vented Rectangular, TC treated Angled 25 734-0094	175 cm² growth area flasks				
Plug sealRectangular, TC treatedAngled50734-1722VentedRectangular, CellBIND* surfaceAngled50734-0093VentedRectangular, TC treatedAngled50734-1723VentedRectangular, TC treated, with barcodeAngled84734-1733VentedRectangular, CellBIND* surface, with barcodeAngled84734-1214VentedRectangular, non-treatedAngled50734-2275225 cm² growth area flasksPhenolicRectangular, TC treatedCanted24734-1519Plug sealTraditional, TC treatedAngled25734-1724VentedRectangular, TC treatedCanted24734-1520VentedTraditional, CellBIND* surfaceAngled25734-0094	Phenolic	Rectangular, CellBIND® surface	Angled	50	734-1206
VentedRectangular, CellBIND® surfaceAngled50734-0093VentedRectangular, TC treatedAngled50734-1723VentedRectangular, TC treated, with barcodeAngled84734-1733VentedRectangular, CellBIND® surface, with barcodeAngled84734-1214VentedRectangular, non-treatedAngled50734-2275225 cm² growth area flasksPhenolicRectangular, TC treatedCanted24734-1519Plug sealTraditional, TC treatedAngled25734-1724VentedRectangular, TC treatedCanted24734-1520VentedTraditional, CellBIND® surfaceAngled25734-0094	Phenolic	Rectangular, TC treated	Angled	50	734-1726
VentedRectangular, TC treatedAngled50734-1723VentedRectangular, TC treated, with barcodeAngled84734-1733VentedRectangular, CellBIND* surface, with barcodeAngled84734-1214VentedRectangular, non-treatedAngled50734-2275225 cm² growth area flasksPhenolicRectangular, TC treatedCanted24734-1519Plug sealTraditional, TC treatedAngled25734-1724VentedRectangular, TC treatedCanted24734-1520VentedTraditional, CellBIND* surfaceAngled25734-0094	Plug seal	Rectangular, TC treated	Angled	50	734-1722
VentedRectangular, TC treated, with barcodeAngled84734-1733VentedRectangular, CellBIND* surface, with barcodeAngled84734-1214VentedRectangular, non-treatedAngled50734-2275225 cm² growth area flasks25 cm² growth area flasksPhenolicRectangular, TC treatedCanted24734-1519Plug sealTraditional, TC treatedAngled25734-1724VentedRectangular, TC treatedCanted24734-1520VentedTraditional, CellBIND* surfaceAngled25734-0094	Vented	Rectangular, CellBIND® surface	Angled	50	734-0093
VentedRectangular, CellBIND* surface, with barcodeAngled84734-1214VentedRectangular, non-treatedAngled50734-2275225 cm² growth area flasksPhenolicRectangular, TC treatedCanted24734-1519Plug sealTraditional, TC treatedAngled25734-1724VentedRectangular, TC treatedCanted24734-1520VentedTraditional, CellBIND* surfaceAngled25734-0094	Vented	Rectangular, TC treated	Angled	50	734-1723
VentedRectangular, non-treatedAngled50734-2275225 cm² growth area flasks734-1219PhenolicRectangular, TC treatedCanted24734-1519Plug sealTraditional, TC treatedAngled25734-1724VentedRectangular, TC treatedCanted24734-1520VentedTraditional, CellBIND® surfaceAngled25734-0094	Vented	Rectangular, TC treated, with barcode	Angled	84	734-1733
225 cm² growth area flasksPhenolicRectangular, TC treatedCanted24734-1519Plug sealTraditional, TC treatedAngled25734-1724VentedRectangular, TC treatedCanted24734-1520VentedTraditional, CellBIND® surfaceAngled25734-0094	Vented	Rectangular, CellBIND® surface, with barcode	Angled	84	734-1214
225 cm² growth area flasksPhenolicRectangular, TC treatedCanted24734-1519Plug sealTraditional, TC treatedAngled25734-1724VentedRectangular, TC treatedCanted24734-1520VentedTraditional, CellBIND® surfaceAngled25734-0094	Vented	Rectangular, non-treated	Angled	50	734-2275
Plug sealTraditional, TC treatedAngled25734-1724VentedRectangular, TC treatedCanted24734-1520VentedTraditional, CellBIND® surfaceAngled25734-0094	225 cm² growth area flasks				
VentedRectangular, TC treatedCanted24734-1520VentedTraditional, CellBIND® surfaceAngled25734-0094	Phenolic	Rectangular, TC treated	Canted	24	734-1519
VentedRectangular, TC treatedCanted24734-1520VentedTraditional, CellBIND® surfaceAngled25734-0094	Plug seal	Traditional, TC treated	Angled	25	734-1724
Vented Traditional, CellBIND® surface Angled 25 <b>734-0094</b>	Vented	Rectangular, TC treated	Canted	24	734-1520
Vented Traditional, TC treated Angled 25 <b>734-1725</b>	Vented	Traditional, CellBIND® surface	Angled	25	734-0094
	Vented	Traditional, TC treated	•	25	734-1725



## Cell culture vessels, HYPERflask™ M Corning®



### PS, sterile, with HDPE cap

The HYPERflask™ M flask is specifically designed for manual use. Each flask has a 1720 cm² cell growth

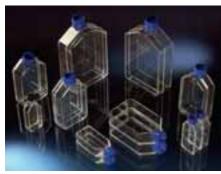
- Corning® CellBIND® surface increases surface wetability for more even and consistent cell attachment
- Each flask is traceable by a serial number that can be read by eye or by a handheld barcode reader
- 10 layer design enables a 10-fold increase in cell yield over traditional 175 cm² flasks, increasing capacity and productivity
- Ergonomic cap, with smooth texture on the liner, requires less torque to seal cap to vessel
- Adapter grid design allows for faster filling and emptying, whilst reducing foam generation

Recommended media volume: 560 ml

Сар	Description	Growth area (cm²)	Neck	Packed	Pk	Cat. No.
Non-treated						
HDPE, flat top	HYPERflask™ M	1720	Straight	4 per bag, 24 per case	24	392-0310
Treated						
HDPE, flat top	HYPERflask™ M	1720	Straight	1 per bag, 4 per case	4	734-1492
HDPE, flat top	HYPERflask™ M	1720	Straight	4 per bag, 4 per case	4	734-1491
HDPE, flat top	HYPERflask™ M	1720	Straight	4 per bag, 24 per case	24	734-1493



### Cell culture flasks, Nunclon™∆ Thermo Scientific



#### PS, sterile

Cell culture flasks with surface areas from 25 to 500 cm<sup>2</sup>, with filter or vent/close caps and straight or angled neck.

- Standard flasks have short, wide necks for easy access
- TripleFlasks™ have the same external dimensions as a standard 175 cm² flask, but have three parallel growth surfaces providing a total culture area of 500 cm², making them ideal for scale-up
- Excellent optical quality and individually leak-tested
- Nunclon™∆ certified surface treatment for optimal cell growth and attachment

Can	Custath area (sm²)	Noale	Decembered of working values (m)	Pk	Cat Na
Cap	Growth area (cm²)	Neck	Recommended working volume (ml)	PK	Cat. No.
Standard flasks					
Vent/close	25	Angled	7	160	734-2081
Vent/close	80	Straight	30	50	734-2046
Vent/close	175	Straight	68	32	734-2067
Filter	25	Angled	7	160	734-2004
Filter	80	Straight	30	50	734-2131
Filter	175	Straight	68	32	734-2129
Filter	175*	Straight	68	32	734-1340
TripleFlasks™					
Vent/close	500	Straight	200	32	734-2000
Filter	500	Straight	200	32	734-2001

<sup>\*</sup> Barcoded 128



## Cell culture flasks, EasYFlasks™, Nunclon™Δ





#### PS, sterile

Designed to allow full access to the growth surface.

- Flask is opened or closed with 1/3 turn of the cap
- "Y" Mark caps allow visual verification of vent position, even when stacked in incubators
- Volume graduations on both sides of the flask
- Angled neck facilitates easy access
- Nunclon™∆ certified surface treatment for optimal cell growth and attachment

			De como en de doco dión o			
Сар	Growth area (cm²)	Neck	Recommended working volume (ml)	Version	Pk	Cat. No.
Nunclon™∆ surface	e treatment					
Vent/close	25	Angled	7	Nunclon Delta-treated	200	734-2063
Filter	25	Angled	7	Nunclon Delta-treated	200	734-2064
Vent/close	75	Angled	30	Nuncion Delta-treated	100	734-2065
Filter	75	Angled	30	Nuncion Delta-treated	100	734-2066
Filter	175	Angled	55	Nunclon Delta-treated	30	734-2167
Vent/close	175	Angled	55	Nunclon Delta-treated	30	734-2168
Vent/close	225	Angled	70	Nunclon Delta-treated	30	734-1337
Filter	225	Angled	70	Nunclon Delta-treated	30	734-1338
Poly-D-Lysine or Co	ollagen I coated					
Filter	25	angled	7	Poly-D-Lysine coated	60	734-2281
Filter	75	angled	25	Poly-D-Lysine coated	30	734-2282
Filter	175	angled	55	Poly-D-Lysine coated	30	734-2283
Filter	25	angled	7	Collagen I coated	60	734-2284
Filter	75	angled	25	Collagen I coated	30	734-2285
Filter	175	angeld	55	Collagen I coated	30	734-2286



### Cell culture flasks, Corning® Primaria™ Corning®



### PS, tissue culture-treated, sterile, non-pyrogenic

The complex surface on Corning® Primaria™ products is homogeneous and stable and is used to improve attachment and differentiation of a variety of cell types. The surface chemistry of Corning® Primaria™ products is confirmed by Electron Scanning for Chemical Analysis (ESCA).

- Nitrogen-containing tissue culture surface chemistry improves attachment, spreading and growth for many primary cells or cell lines
- Vented caps incorporate a 0,2 μm hydrophobic membrane
- Optically clear and no special storage required
- · Convenient, peel-open packaging

Capacity (ml)	Сар	Growth area (cm²)	Neck	Pk	Cat. No.
50	Vented	25	Canted	100	734-0073
250	Vented	75	Straight	100	734-0074
50	Plug seal	25	Canted	200	734-0075
250	Plug seal	75	Straight	100	734-0076

Note: Growth area and capacity are nominal



## Collagen I cell culture flasks, Corning® BioCoat™ Corning®



#### PS coated with rat tail collagen type I, sterile, non-pyrogenic

The uniform application of collagen type I to the surface of tissue culture vessels has been found to improve cell attachment and increase proliferation rates for a variety of normal or transformed mammalian cell types.

Capacity (ml)	Сар	Growth area (cm²)	Neck	Pk	Cat. No.
70	Vented	25	Canted	10	734-0158
70	Vented	25	Canted	50	734-0289
250	Vented	75	Canted	5	734-0159
250	Vented	75	Canted	50	734-0290
600	Vented	150	Straight	40	734-0291
750	Vented	175	Straight	5	734-0161
750	Vented	175	Straight	40	734-0292

Note: Growth area and capacity are nominal



## Poly-D-lysine cell culture flasks, Corning® BioCoat™ Corning®



#### PS, coated with poly-D-lysine, sterile, non-pyrogenic

Poly-D-lysine (PDL) is a synthetic compound that enhances cell adhesion and protein absorption by altering surface charges on the culture substrate. Poly-lysine surface treatments support applications including attachment and spreading of a variety of cell lines; cell differentiation and neurite outgrowth; attachment of transfected cell lines; and survival of primary neurons in culture. As PDL is a synthetic molecule, it does not stimulate biological activity in the cells cultured on it, and it does not introduce impurities carried by natural polymers.

Capacity (ml)	Сар	Growth area (cm <sup>2</sup> )	Neck	Pk	Cat. No.
70	Vented	25	Canted	50	734-0311
250	Vented	75	Canted	50	734-0418
600	Vented	150	Straight	40	734-0312
750	Vented	175	Straight	40	734-0419

Note: Growth area and capacity are nominal





## Gelatin cell culture flasks, Corning® BioCoat™ Corning®



### PS, coated with porcine gelatin, sterile, non-pyrogenic

Corning® BioCoat™ gelatin provides an attachment and growth promoting substrate for the culture of a variety of cell types. Gelatin is commonly used in the culture of normal and transfected cell types, including vascular endothelial, muscle, embryonic stem (ES) and F9 teratocarcinoma cells. Gelatin is a heterogeneous mixture of water soluble proteins derived through the hydrolysis of collagen. Applications include promotion of cell attachment and spreading of vascular endothelial cells (for instance, BME, BAEC, ES cells), C2C12 myoblasts and MM14 myoblasts; culture of normal and transfected F9 teratocarcinoma cells for gene expression studies; and culture of HUVEC for E-Selectin expression and VEGF induction.

- Gelatin substrate enhances the attachment of a variety of normal and transfected cell types
- Pre-treatment with gelatin eliminates time consuming preparation, saving time and money
- Lot-to-lot consistency ensures reproducible results

Capacity (ml)	Сар	Growth area (cm <sup>2</sup> )	Neck	Pk	Cat. No.
250	Vented	75	Canted	5	734-0162
250	Vented	75	Canted	50	734-0293

Note: Culture area and capacity are nominal



## Multi-layer cell culture flasks, Falcon® Multi-Flask Corning®



#### PS, tissue culture-treated, with membrane filter cap, non-pyrogenic

Cell culture treated Falcon® Multi-Flasks are available with 3 or 5 layers and cell growth surfaces 525 cm² or 875 cm². They provide greater surface area and cell yield than single layer T-flasks but with the same footprint and seeding densities, making it easy to scale-up existing protocols.

- Even distribution of the media across all layers, proven vacuum-gas tissue culture surface treatment and effective gas exchange all combine to provide an optimal cell culture environment
- Cells can be easily accessed by pipette
- Batch number printed on each individual flask for improved traceability
- Manufactured in compliance with cGMP standards

Сар	Culture area (cm²)	Description	Pk	Cat. No.
Vented	525	Multi-Flask, 3-layer	12	734-2456
Vented	875	Multi-Flask 5-laver	8	734-2457



## Bioreactors, CELLine™ Wheaton



CELLine™ is a disposable, two-compartment bioreactor manufactured from optically clear virgin PS with a gas transfer bottom made of a moulded silicone membrane providing a 0,2 µm vent barrier. The compartments are separated by a 10 kDa semi-permeable cellulose acetate membrane and individually pressure tested for integrity. CELLine™ classic (CL) is ideal for laboratory scale applications using suspension cells or adherent cells in combination with microcarriers. The unit is optimised for cultivation of hybridomas and many other cell types (for example CHO, NSO, SF cells). CELLine™ adhere (AD) is specifically adapted to allow growth of anchorage-dependent cells (for example HEK, BHK, CHO cells). The CELLine™ AD bioreactor contains a woven PET matrix in the cell compartment providing an ideal surface for cell attachment.

- Highly efficient with 50 100 times higher product concentrations compared to classic cell culture disposables
- As simple to use as a standard tissue culture flask
- Uses 90% less media supplements and requires less handling time than conventional flasks
- Easily stackable
- Packed individually in easy to open medical-grade blister packs, sterilised by gamma irradiation, and pyrogen-free

Model	CELLine™ CL 350	CELLine™ CL 1000	CELLine™ AD 1000	
Cell compartment cap	24 mm PP cap with PE liner	28 mm PP cap with PE liner		
Culture volume (ml)	5	15		
L×W×H (mm)	190×95×62	275×120×80		
Media volume (ml)	350	1000		
Medium compartment	28 mm vented (0,2 μm) green PP cap with PP liner	38 mm vented (0,2 μm) white PP cap with PP liner	38 mm vented (0,2 μm), black PP cap with PP liner	
cap	20 mm rented (0/2 pm) green r cap marr mer	30 mm rentea (0/2 µm/, mme r r tap mar r mme	John Tented (0/2 pm// zhack 11 cap than 11 mile)	

Vertical and horizontal markings	50 - 350 ml	100 - 1000 ml		
Weight (g)	185	334	336	

Description	Pk	Cat. N	No.
CELLine™ CL 350-1	1	392-1	000
CELLine™ CL 350-5	5	734-2	632
CELLine™ CL 1000-1	1	392-1	007
CELLine™ CL 1000-3	3	734-2	631
CELLine™ AD 1000-1	1	392-1	800
(FILine™ AD 1000-3	3	734-2	633



## Culture bottles and culture flasks DURAN Group







#### DURAN®, borosilicate glass

Culture bottles and culture flasks (Erlenmeyer shape) with straight rim, suitable for either Kapsenberg caps or metal caps (available separately).

- Very good chemical resistance
- High temperature resistance
- Minimal thermal expansion, giving relatively high resistance to temperature changes

Capacity (ml)	Height (mm)	Ø ext. (mm)	Neck Ø ext. (mm)	Type	Pk	Cat. No.
50	107	40	18	Culture bottles for Kapsenberg caps	1	391-0205
100	150	40	18	Culture bottles for Kapsenberg caps	1	391-0210
200	175	50	18	Culture bottles for Kapsenberg caps	1	391-0215
100	120	64	18	Culture flasks, Erlenmeyer shape, for Kapsenberg caps	1	391-0250
100	114	64	38	Culture flasks, Erlenmeyer shape, for metal caps	1	391-0260
200	138	79	38	Culture flasks, Erlenmeyer shape, for metal caps	1	391-0265
250	149	85	38	Culture flasks, Erlenmeyer shape, for metal caps	1	391-0270
300	161	87	38	Culture flasks, Erlenmeyer shape, for metal caps	1	391-0275
500	183	105	38	Culture flasks, Erlenmeyer shape, for metal caps	1	391-0280
1000	229	131	38	Culture flasks, Erlenmeyer shape, for metal caps	1	391-0285
2000	302	166	38	Culture flasks, Erlenmeyer shape, for metal caps	1	391-0290

Description	Cap size (mm)	Pk	Cat. No.
Caps for culture media bottles			
Kapsenberg caps	18	1	391-0911
Metal caps, stainless steel	38	1	391-0950
Metal caps, anodised blue	38	1	214-1169



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## Fernbach culture flasks DURAN Group



#### DURAN®, borosilicate glass

With beaded rim. Providing the large liquid surface area necessary for growing microorganisms in liquid culture media. Provides for faster growth through improved ventilation.

- Very good chemical resistance
- High temperature resistance
- Minimal thermal expansion, giving relatively high resistance to temperature changes

Capacity (ml)	Height (mm)	Ø ext. (mm)	Neck Ø ext. (mm)	Туре	Pk	Cat. No.
450	100	117	29	Bulb shape	1	391-0330
1800	158	200	45	Conical shape	1	391-0320

## Culture vessels, Techne®



#### Siliconised borosilicate glass

For use with the MCS platform biological stirrers, ideal for suspension cell culturing with reduced cell attachment.

- Incorporate a unique base design which, together with the bulb-ended stirrer, ensures that cultures are lifted into suspension at the lowest possible speeds preventing cell damage
- Can be sealed for use with pathogenic materials
- Culture vessels are siliconised to reduce the possibility of cells attaching to and growing on the surfaces

Capacity (ml)	Neck	Pk	Cat. No.
250	Straight	1	734-0882
500	Straight	1	734-0880
1000	Straight	1	734-0881



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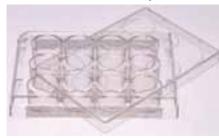
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## Multiwell cell culture plates, Standard Line



#### Clear PS, sterile and certified non pyrogenic

VWR Collection multiwell plates are vacuum gas plasma treated for consistent cell attachment and growth.

- Well volume uniformity ensures uniform growth surface area exposure
- Raised rims on wells and condensation rings on the lid reduce evaporation and minimise edge effects
- Single position lid reduces misplacement and the risk of contamination
- Wells with alphanumeric code for easy identification

Manufactured in 100 000 grade cleanroom environment.

Packaging: Individually wrapped in peel-to-open paper/plastic blister packs.

N ( II	C II ( 2)	B	10/ II   / IV	DI.	C 1 N
No. of wells	Culture area (cm²)	Recommended working volume (ml)	Well volume (ml)	Pk	Cat. No.
6	9,6	1,90 - 2,90	17,0	100	734-2323
12	3,85	0,76 - 1,14	6,80	100	734-2324
24	1,93	0,38 - 0,57	3,50	100	734-2325
48	0,84	0,19 - 0,29	1,55	100	734-2326
96 F	0,33	0,075 - 0,20	0,39	100	734-2327
96 U	0,32	0,075 - 0,20	0,32	100	734-2328

Recommended working volume (ml) = per well



## Multiwell cell culture plates, Falcon® Corning®



#### PS, sterile, non-pyrogenic

All tissue culture treatments render polystyrene hydrophilic and result in the incorporation of a variety of anionic functional groups that support cell culture. To ensure reproducible results and conditions, all Falcon® tissue culture treatment is performed in a vacuum chamber.

Corning® Primaria™ tissue culture treatment additionally incorporates nitrogen-containing functional groups that have been shown to improve attachment and spreading of some cell types.

Non-treated plates have a more hydrophobic surface and show reduced cell attachment.

- Labyrinth lid, condensation rings, and deep well design control contamination, reduce evaporation, and minimise edge effects
- Reliable vacuum-gas plasma tissue culture treatment provides well-to-well and plate-to-plate consistency
- Convenient, peel-open packaging
- Individual and Ready-Stack (RS) trays are PET (Code 1) and recyclable

Colour: Clear

Description	Culture area (cm²)	Volume (ml)	Sterile	Packed	Pk	Cat. No.
6-well (flat-bottom) with lid						
Non treated	9,6	15,5	+	1/tray	50	734-0948
Standard TC-treated	9,6	15,5	+	1/tray	50	734-0019
Standard TC-treated	9,6	15,5	+	6/bag	36	734-0054
Corning® Primaria™ TC-treated	9,6	15,5	+	1/tray	50	734-0077
Standard TC-treated	9,6	15,5	+	10/RS tray	60	736-2025
12-well (flat-bottom) with lid						
Non treated	3,8	6	+	1/tray	50	734-0947
Standard TC-treated	3,8	6	+	1/tray	50	391-0006
Standard TC-treated	3,8	6	+	6/bag	36	734-0055
24-well (flat-bottom) with lid						
Non treated	2,0	3,5	+	1/tray	50	734-0949
Standard TC-treated	2,0	3,5	+	1/tray	50	734-0020
Standard TC-treated	2,0	3,5	+	6/bag	36	734-0056
Corning® Primaria™ TC-treated	2,0	3,5	+	1/tray	50	734-0078
Standard TC-treated	2,0	3,5	+	10/RS tray	60	736-2026
48-well (flat-bottom) with lid						
Non treated	0,75	1,4	+	1/tray	50	734-0956
Standard TC-treated	0,75	1,4	+	1/tray	50	734-0028
Standard TC-treated	0,75	1,4	+	6/bag	36	734-0058
96-well (flat-bottom) with lid						
Non treated	0,32	0,37	+	1/tray	50	734-0954
Standard TC-treated	0,32	0,37	+	1/tray	50	734-0023
Standard TC-treated	0,32	0,37	+	5/bag	50	734-0025
Corning® Primaria™ TC-treated	0,32	0,37	+	1/tray	50	734-0079
Standard TC-treated	0,32	0,37	+	25/bag	100	734-1376
Standard TC-treated	0,32	0,37	+	14/RS tray	84	736-2027

VWR

Description	Culture area (cm²)	Volume (ml)	Sterile	Packed	Pk	Cat. No.
96-well (round-bottom) with lid						
Non treated	0,36	0,32	+	1/tray	50	734-0955
Standard TC-treated	0,36	0,32	+	1/tray	50	734-0027
Standard TC-treated	0.36	0.32	+	5/bag	50	734-0057



# Multiple well cell culture plates, Costar® Corning®



#### Clear PS, flat bottom, with lid

Available with a choice of surface treatments.

- Lids with condensation rings to reduce contamination
- · Uniform footprint for ease of stacking
- Individual alphanumeric codes for well identification
- Sterilised by gamma radiation
- Certified non-pyrogenic

Description	Colour	Packed	Pk	Cat. No.
6-well plates, Corning® CellBIND® surface	Clear	5/bag	50	734-1210
12-well plates, Corning® CellBIND® surface	Clear	5/bag	50	734-1211
24-well plates, Corning® CellBIND® surface	Clear	5/bag	50	734-1212
48-well plates, Corning® CellBIND® surface	Clear	5/bag	50	734-4067
6-well plates, Ultra-Low Attachment surface, individually wrapped	Clear	1/bag	24	734-1582
24-well plates, Ultra-Low Attachment surface, individually wrapped	Clear	1/bag	24	734-1584
6-well plates, TC treated	Clear	5/bag	100	734-1596
6-well plates, TC treated, individually wrapped	Clear	1/bag	50	734-1599
12-well plates, TC treated	Clear	5/bag	100	734-1597
12-well plates, TC treated, individually wrapped	Clear	1/bag	50	734-1598
24-well plates, TC treated	Clear	5/bag	100	734-1606
24-well plates, TC treated, individually wrapped	Clear	1/bag	100	734-1604
24-well plates, TC treated, individually wrapped	Clear	1/bag	50	734-1605
48-well plates, TC treated, individually wrapped	Clear	1/bag	100	734-1607
6-well plates, non treated	Clear	5/bag	100	392-0213
12-well plates, non treated	Clear	5/bag	100	392-0214
24-well plates, non treated	Clear	5/bag	100	392-0215



## 96 MicroWell™ plates, Nunclon™∆ Thermo Scientific



## PS, high flange design, sterile

Ideal for cell culture, cloning, viral titrations and cell fusion.

- Plate edges and lids designed to reduce evaporation
- Raised well rims reduce risk of cross contamination
- Lids shaped to facilitate stacking and handling
- 96-well footprint fits standard equipment

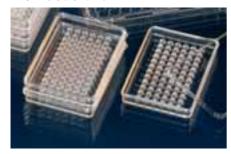
Colour: Clear

External L×W: 128×86 mm

Description	Colour	Recommended working volume (μl)	Pk	Cat. No.
96-MicroWell™ plate, round bottomed wells, without lid	Clear	200	50	734-2033
96-MicroWell™ plate, round bottomed wells, with lid	Clear	200	50	734-2080
96-MicroWell™ plate, flat bottomed wells, without lid	Clear	200	50	732-2607
96-MicroWell™ plate, flat bottomed wells, without lid	Clear	200	180	732-2601
96-MicroWell™ plate, flat bottomed wells, with lid	Clear	200	50	734-2097
96-MicroWell™ plate, flat bottomed wells, with lid	Clear	200	160	734-2073



## MiniTrays, Nunclon™Δ Thermo Scientific



## **PS, with lid, sterile** External L×W: 84×59 mm

Description	Colour	Recommended working volume (μl)	Pk	Cat. No.
MiniTray 60-well, conical well shape	Clear	8	150	734-2079
MiniTray, 72-well, conical well shape	Clear	8	150	734-2005



## Cell culture plates, Nunc™ Multidish



#### PS, sterile, with lid

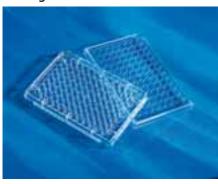
Useful in all areas of cell culture, including scale up and cloning.

- Raised well rims lower the risk of cross-contamination
- Flat bottom wells allow optimum optical quality
- Nunclon™∆ certified surface treatment

Description	Culture area (cm²)	Recommended working volume (ml)	Packed	Pk	Cat. No.
4-well multidish, 66×66 mm	1,9	1,0	4/bag	120	734-2176
6-well multidish, 128×86 mm	9,6	3,0	1/bag	75	391-8036
6-well multidish, 128×86 mm	9,6	3,0	5/bag	85	734-0991
12-well multidish, 128×86 mm	3,5	2,0	1/bag	75	734-2156
24-well multidish, 128×86 mm	1,9	1,0	1/bag	75	734-0992
24-well multidish, 128×86 mm	1,9	1,0	5/bag	85	734-0993
48-well multidish, 128×86 mm	1,1	0,5	1/bag	75	734-2157
48-well multidish, 128×86 mm	1,1	0,5	5/bag	85	734-1147



# Cell culture plates, 96-well Corning®



### PS, clear, with lid

- CellBIND® surface increases wetability for more even and consistent cell attachment
- Ultra-Low Attachment plates feature a covalently bound hydrogel layer that minimises cell attachment, protein absorption and cellular activation
- Sterilised by gamma irradiation
- Certified non-pyrogenic

Recommended working volume: 75 - 200  $\mu l$ 

Description	Culture area (cm²)	Well volume (μl)	Sterile	Packed	Pk	Cat. No.
Standard plate, round bottom TC-treated	0,32	330	+	20/bag	100	734-1546
Standard plate, round bottom, TC-treated, individually wrapped	0,32	330	+	1/bag	50	734-1797
Round bottom plate, Ultra-Low Attachment, individually wrapped	0,32	330	+	1/bag	24	444-1020
Round bottom plate, untreated, individually wrapped	0,32	330	+	1/bag	50	392-0291

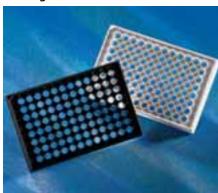
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Description	Culture area (cm²)	Well volume (μl)	Sterile	Packed	Pk	Cat. No.
V-bottom plate, TC-treated, individually wrapped	0,38	320	+	1/bag	50	734-1798
Standard plate, flat bottom, CellBIND® surface	0,32	360	+	5/bag	50	734-4058
Standard plate, flat bottom, Ultra-Low Attachment, individually wrapped	0,32	360	+	1/bag	24	734-1585
Standard plate, flat bottom, TC-treated, with low evaporation lid	0,32	360	+	5/bag	50	734-1789
Standard plate, flat bottom, TC-treated, with low evaporation lid, individually wrapped	0,32	360	+	1/bag	50	734-1793
Standard plate, flat bottom, TC-treated, individually wrapped	0,32	360	+	1/bag	50	734-1794
Standard plate, flat bottom, TC-treated, individually wrapped	0,32	360	+	1/bag	100	734-1796
Standard plate, flat bottom, TC-treated	0,32	360	+	10/bag	50	734-1799



# Cell culture plates, 96-well, for fluorescent and luminescent applications Corning®

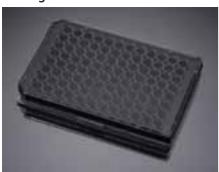


#### PS

- Black plates are designed to lower background in fluorescent assays and reduce cross-talk
- White plates are designed for luminescent assays
- Treated for optimal cell attachment
- Sterilised by gamma irradiation
- Certified non-pyrogenic

Description	Pk	Cat. No.
Solid white plate, TC treated, without lid	100	734-1549
Black plate with clear bottom, TC treated, individually wrapped	48	734-1609
White plate with clear bottom, TC treated, individually wrapped	48	734-1610
Black plate with clear bottom, TC treated	100	734-1661
White plate with clear bottom, TC treated	100	734-1660
Solid black plate, TC treated	100	734-1664
Solid white plate, TC treated	100	734-1665

# 96-well imaging plates, Falcon® Corning®



PS microplate with tissue culture treated surface.

- Flat bottom, with lid
- Black wells with clear bottom
- Working volume: 25 to 340 μl

Description	Colour	Volume (μl)	Form	Pk	Cat. No.
96-well imaging plate, tissue culture treated	Black/Clear	390	Flat bottom	32	734-2480



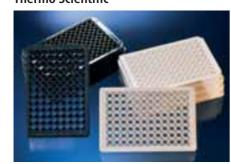
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### Optical bottom plates, 96-well, Nunclon™∆ Thermo Scientific



#### PS plate with either polymer or coverglass base, sterile, with lid

These plates, with white or black upper structure and clear base, are designed to provide optimum clarity for viewing well contents.

- Flat bottom well geometry for plate reader access
- Footprint compatible with standard equipment and automated systems
- Surface treatment ensures optimal cell attachment and growth
- No. 1.5 coverglass base for minimum light scatter and low autofluorescence ensures accurate results due to higher signal to noise ratios

Working range:  $50 - 200 \,\mu l/well$ 

Description	Colour	Pk	Cat. No.
96-well optical bottom plate with coverglass base	Black/Clear	30	734-2088
96-well optical bottom plate with coverglass base	White/Clear	30	734-2089
96-well optical bottom plate with polymer base	Black/Clear	30	732-2604
96-well optical bottom plate with polymer base	White/Clear	30	732-2605



## Cell culture plates, 384-well, Nunc™ Thermo Scientific



#### PS, tissue culture-treated, sterile

Ideal for cell culture, cell fusion, cloning and viral titrations.

- Nunclon™∆ surface treatment for optimal cell growth and attachment
- Non-toxic, non-pyrogenic
- Rounded square wells eliminate wicking
- Optimised for scintillation counting

Working range: 10 - 100 µl

Description	Colour	Pk	Cat. No.
384-well plate, flat bottom, with lid	Transparent	30	734-2091
384-well plate, flat bottom, with lid	Black	30	734-2084
384-well plate, flat bottom, with lid	White	30	734-2090
384-well plate, flat bottom, without lid	White	100	734-2095

## Lids for microtitre plates, Nunc™ Thermo Scientific



Description	Pk	Cat. No.
Universal lid, non sterile, for standard height 384- and 1536-well plates	180	732-2704
Lid for 96-well MicroWell™ plate, with cut-off corners and condensation rings	100	734-2184
Lid for 96-well MicroWell™ plate, sterile, with cut-off corners and condensation rings	50	734-2185
Lid for 384-well MicroWell™ plate, with cut-off corners and evaporation barrier, individually wrapped	60	732-2732
Lid for 384-well MicroWell™ plate, sterile, with cut-off corners and evaporation barrier	180	732-2733
Low profile lid for standard height 384-well plates and OmniTrays	120	732-2752



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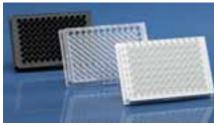
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## 96-well microplates for cell culture, BRANDplates® Brand



#### PS, solid or with transparent base

Plates are available with different well shapes (round U-bottom, conical V-bottom, flat F-bottom or flat C-bottom with curved edges), in different colours, and with a choice of cell culture treated surfaces.

#### cellGrade™

The standard surface for cultivation of adherent cell lines. Chemical groups on the surface of the plate bind to serum compounds, stimulating the growth of immobilised cells.

#### cellGrade™ plus

This surface has a protein like structure. Cultivation of cells in serum reduced media is possible. cellGrade™ plus surface is suitable for the cultivation of more fastidious cell lines.

#### cellGrade™ premium

This surface is a poly-D-lysine equivalent. With the optimised surface characteristics, the most fastidious cell lines can be cultivated. Cells show growth comparable to poly-D-lysine surfaces.

#### inertGrade™

Surface inhibits cell binding. Especially suited for the cultivation of cells when adhesion is not desired, for example when working with cell suspensions or stem cells.

- All BRANDplates® are alphanumerically labelled, stackable and compatible with most standard microplate readers and washers
- Standard 96-well plates have coloured alphanumeric code identifying surface type (cell culture treated orange, immuno treated blue, non-treated grey)
- White plates provide maximum reflection and minimum crosstalk during luminescence measurements; black plates provide minimum backlight scatter during fluorescence analyses

BRANDplates® are non cytotoxic according to ISO 10993-5, free of endotoxins (<0,01 EU/ml), and DNA-, DNase- and RNase- free. Sterile products comply with ISO 11137 and AAMI guidelines.

Description	Colour	Culture area (cm²)	Well volume	Sterile	Pk	Cat. No.
cellGrade™	Colour	Culture area (CIII )	vveii voiume	Sterne	PK	Cat. No.
Standard plate with U-bottom	Clear	0,32	330 μΙ	+	50	735-2097
Standard plate with V-bottom	Clear	0,33	360 μl	+	50	735-2097
Standard plate with F-bottom	Clear	0,32	350 μl	+	50	735-2098
Standard plate with r-bottom	Clear		•		50	735-2099
Standard plate with F-bottom	White	0,32 0,32	350 µl	+	50	735-2100
			350 μl	+		
Standard plate with F-bottom	Black	0,25	350 μl	+	50	735-2102
Transparent base with F-bottom	White/Clear	0,31	330 µl	+	50	735-2103
Transparent base with F-bottom	Black/Clear	0,31	330 μΙ	+	50	735-2104
cellGrade™ plus	-1		1			
Standard plate with F-bottom	Clear	0,32	350 μΙ	+	50	735-2116
Standard plate with F-bottom	White	0,32	350 μΙ	+	50	735-2117
Standard plate with F-bottom	Black	0,32	350 μΙ	+	50	735-2118
Transparent base with F-bottom	White/Clear	0,31	330 μΙ	+	50	735-2119
Transparent base with F-bottom	Black/Clear	0,31	330 μl	+	50	735-2120
cellGrade™ premium						
Standard plate with F-bottom	Clear	0,32	350 μΙ	+	50	735-2124
Standard plate with F-bottom	White	0,32	350 μΙ	+	50	735-2125
Standard plate with F-bottom	Black	0,32	350 μΙ	+	50	735-2126
Transparent base with F-bottom	White/Clear	0,31	330 μΙ	+	50	735-2127
Transparent base with F-bottom	Black/Clear	0,31	330 μΙ	+	50	735-2128
inertGrade™						
Standard plate with U-bottom	Clear	0,32	330 μΙ	+	40	735-2082
Standard plate with F-bottom	Clear	0,32	350 µl	+	40	735-2083
Standard plate with U-bottom	White	0,32	330 µl	+	40	735-2084
Standard plate with F-bottom	White	0,32	350 µl	+	40	735-2085
Standard plate with C-bottom	White	0,25	350 µl	+	40	735-2086
Standard plate with U-bottom	Black	0,32	330 µl	+	40	735-2087
Standard plate with F-bottom	Black	0,32	350 μΙ	+	40	735-2088
Standard plate with C-bottom	Black	0,25	350 μΙ	+	40	735-2089
Transparent base with F-bottom	White/Clear	0,31	330 μΙ	+	40	735-2090
Transparent base with F-bottom	Black/Clear	0,31	330 μΙ	+	40	735-2091
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## Lids for BRANDplates® Brand



Description	Pk	Cat. No.
With condensation rings for standard 96-well plates	100	732-1131
Without condensation rings for 96-well plates	100	732-1132
Without condensation rings for 384-well plates and for 96-well plates with transparent bottom	50	732-1133
Without condensation rings for 1536-well plates	50	732-1134

## Gelatin cell culture plates, Corning® BioCoat™ Corning®



### PS coated with porcine gelatin

Corning® BioCoat™ gelatin provides an attachment and growth promoting substrate for the culture of a variety of cell types. Gelatin is commonly used in the culture of normal and transfected cell types, including vascular endothelial, muscle, embryonic stem (ES) and F9 teratocarcinoma cells. Gelatin is a heterogeneous mixture of water soluble proteins derived through the hydrolysis of collagen. Applications include promotion of cell attachment and spreading of vascular endothelial cells (for instance, BME, BAEC, ES cells), C2C12 myoblasts and MM14 myoblasts; culture of normal and transfected F9 teratocarcinoma cells for gene expression studies; and culture of HUVEC for E Selectin expression and VEGF induction.

- Gelatin substrate enhances the attachment of a variety of normal and transfected cell types
- Pre-treatment with gelatin eliminates time consuming preparation, saving time and money
- Lot-to-lot consistency ensures reproducible results

Description	Colour	Pk	Cat. No.
6-well plate	Transparent	5	734-0251
96-well plate	Transparent	5	734-0403
6-well plate	Transparent	50	734-0322
96-well plate	Transparent	50	734-0420



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## Collagen I cell culture plates, Corning® BioCoat™ Corning®



#### PS coated with rat tail collagen type I

Collagen is an integral part of the framework that holds cells and tissues together and has been recognised as a useful matrix for improving cell culture. *In vitro* use of collagen can exert effects on the adhesion, morphology, growth, migration, and differentiation of a variety of cell types. Applications include promotion of cell attachment and spreading, rapid expansion of cell populations, serum-free or reduced serum culture, studies of the effects of collagen I on cell behaviour, improving survival of primary cell lines in culture, and cell adhesion assays.

- Uniform application of rat tail collagen type I for consistent performance
- Manufactured in a highly controlled environment, and rigorously tested to assure product consistency and performance

periormanee			
Description	Colour	Pk	Cat. No.
6-well plate	Clear	5	734-0108
6-well plate	Clear	50	734-0274
12-well plate	Clear	5	734-0166
12-well plate	Clear	50	734-0295
24-well plate	Clear	5	734-0115
24-well plate	Clear	50	734-0277
48-well plate	Clear	5	734-0170
48-well plate	Clear	50	734-0296
96-well plate	Clear	5	734-0114
96-well plate	Clear	50	734-0276
96-well plate	Clear	80	734-1129
96-well plate	White	5	734-0179
96-well plate	White	50	734-0303
96-well plate	White	80	734-1130
96-well plate	Black/Clear	5	734-0248
96-well plate	Black/Clear	50	734-0319
96-well plate	Black/Clear	80	734-1131
96-well plate	White/Clear	5	734-0249
96-well plate	White/Clear	50	734-0320
96-well plate	White/Clear	80	734-1132
384-well plate	Clear	5	734-0263
384-well plate	Clear	50	734-0331
384-well plate	White	5	734-0262
384-well plate	White	50	734-0330
384-well plate	White	80	734-1134
384-well plate	Black/Clear	5	734-0264
384-well plate	Black/Clear	50	734-0332
384-well plate	Black/Clear	80	734-1136
384-well plate	White/Clear	5	734-0261
384-well plate	White/Clear	50	734-0329
384-well plate	White/Clear	80	734-1133



## Poly-L-lysine and poly-D-lysine cell culture plates, Corning® BioCoat™ Corning®



#### PS, coated with poly-L-Lysine or poly-D-Lysine

Poly-D-lysine (PDL) and poly-L-lysine (PLL) are synthetic compounds that enhance cell adhesion and protein absorption by altering surface charges on the culture substrate. PDL and PLL surface treatments support applications including attachment and spreading of a variety of cell lines; cell differentiation and neurite outgrowth; attachment of transfected cell lines; and survival of primary neurons in culture. As PDL and PLL are synthetic molecules, they do not stimulate biological activity in the cells cultured on them, and they do not introduce impurities carried by natural polymers.

Description	Colour	Pk	Cat. No.
Corning® BioCoat™ poly-D-lysine			
6-well plate	Clear	5	734-0120
6-well plate	Clear	50	734-0278
12-well plate	Clear	5	734-0151
12-well plate	Clear	50	734-0286
24-well plate	Clear	5	734-0121
24-well plate	Clear	50	734-0279
48-well plate	Clear	5	734-0174
48-well plate	Clear	50	734-0298
96-well plate	Clear	5	734-0146
96-well plate	Clear	50	734-0282
96-well plate	Clear	80	734-1121
96-well plate	White	5	734-0237
96-well plate	White	50	734-0316
96-well plate	White	80	734-1122
96-well plate	Black/Clear	5	734-0245
96-well plate	Black/Clear	50	734-0317
96-well plate	Black/Clear	80	734-1123
96-well plate	White/Clear	5	734-0250
96-well plate	White/Clear	50	734-0321
96-well plate	White/Clear	80	734-1124
384-well plate	Clear	5	734-0259
384-well plate	Clear	50	734-0327
384-well plate	White	5	734-0258
384-well plate	White	50	734-0326
384-well plate	Black/Clear	5	734-0260
384-well plate	Black/Clear	50	734-0328
384-well plate	Black/Clear	80	734-1128
384-well plate	White/Clear	5	734-0257
384-well plate	White/Clear	50	734-0325
384-well plate, Small Volume	Black/Clear	5	392-0317
384-well plate, Small Volume	Black/Clear	50	392-0318
Corning® BioCoat™ poly-L-lysine			
6-well plate	Clear	50	734-0299
96-well plate	Clear	50	734-0300

## Fibronectin cell culture plates, Corning® BioCoat™ Corning®



#### PS. coated with fibronectin

Fibronectin-coated cell culture plates have a number of applications, including the promotion of cell attachment, proliferation and differentiation of a variety of cell types, particularly fibroblasts and other mesenchymally derived cells.

Description	Colour	Pk	Cat. No.
6-well plate	Transparent	5	734-0110
12-well plate	Transparent	5	734-0167
24-well plate	Transparent	5	734-1316
48-well plate	Transparent	5	734-0171
96-well plate	Transparent	5	734-0116

## Laminin cell culture plates, Corning® BioCoat™ Corning®

#### PS, coated with mouse laminin

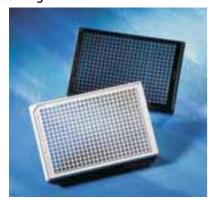
Laminin, a major structural component of basement membranes, has many varied functions that are mediated by binding to various components of the basement membrane (for example, collagen IV) and to cell-surface receptors. Laminin-coated cell culture plates have a number of applications, including the promotion of cell adhesion, proliferation and differentiation of a variety of cell types, particularly neurons, epithelial cells, myocytes and myoblasts.

VWR

Description	Colour	Pk	Cat. No.
6-well plate	Transparent	5	734-0112
12-well plate	Transparent	5	734-0168
24-well plate	Transparent	5	734-0118
48-well plate	Transparent	5	734-0172
96-well plate	Transparent	5	734-0117



# Cell culture plates, poly-D-lysine coated Corning®



#### PS, flat bottom, sterile (aseptic assembly) and certified non-pyrogenic, with lid

Microplates coated with poly-D-lysine for enhanced cell attachment.

- Non reversible lids with condensation rings to reduce evaporation (96-well plates)
- Optically clear flat well bottom permits direct microscopic viewing
- Opaque walls to prevent well-to-well crosstalk
- Can be used for both top and bottom reading instruments
- Individual alphanumeric codes for well identification

Packaging: Bulk packed, 20 per bag.

Description	Colour	Culture area (cm²)	Recommended working volume (µl)	Well volume (μl)	Sterile	Pk	Cat. No.
96-well microplate, poly-D-lysine coated	Clear	0,32	75 - 200	360	+	100	734-2291
96-well microplate, poly-D-lysine coated	Black	0,32	75 - 200	360	+	100	734-2292
96-well microplate, poly-D-lysine coated	White	0,32	75 - 200	360	+	100	734-2293
384-well microplate, poly-D-lysine coated	Clear	0,06	20 - 80	95	+	100	734-2294
384-well microplate, poly-D-lysine coated	Black	0,06	20 - 80	95	+	100	734-2295
384-well microplate, poly-D-lysine coated	White	0,06	20 - 80	95	+	100	734-2296

## Plates, poly-D-lysine coated, Nunc™ Thermo Scientific



#### PS ready to use plates pre-coated with poly-D-lysine, with lid

- Consistent growth surface from each lot ensures guaranteed performance
- High quality surface promotes cell attachment, growth and differentiation in serum-free and serum-containing media
- Stable at room temperature

W×L: 128×86 mm

Description	Colour	Pk	Cat. No.
96-well optical bottom plate, high flange design, PS with polymer film base	White/Clear	20	734-1177
96-well optical bottom plate, high flange design, PS with polymer film base	Black/Clear	20	734-1184
384-well optical bottom plate, pinchbar design, PS with polymer film base	Black/Clear	20	734-1178
MicroWell™ plate, F96, high flange design, PS	Clear	20	734-1186







## Cell culture dishes, Standard Line



#### Clear PS, sterile and certified non pyrogenic

VWR Collection dishes are vacuum gas plasma treated for consistent cell attachment and growth. Dishes are optically clear, making them suitable for microscopy.

- Flat bottom and uniform wall thickness ensure dishes are distortion-free
- Stacking rings for easier stacking and handling
- 60, 70 and 100 mm dishes have a gripping ring incorporated in the design
- Every inner bag is printed with a batch number for traceability

Manufactured in 100 000 grade cleanroom environment.

**Packaging**: Packed in resealable self-standing bags allowing dishes to remain upright, lowering the risk of contamination.

Description	Ø (mm)	Height (mm)	Growth area (cm²)	Packed	Pk	Cat. No.
Cell culture dish	35	12	8,5	10/bag	960	734-2317
Cell culture dish with gripping ring	60	18	21,2	10/bag	600	734-2318
Cell culture dish with gripping ring	70	15	36,3	10/bag	600	734-2319
Cell culture dish	90	17	55,0	10/bag	500	734-2320
Cell culture dish with gripping ring	100	22	60,8	10/bag	300	734-2321
Cell culture dish	150	22	143 0	1/bag	120	734-2322



## Cell culture dishes, Falcon® Corning®



#### PS, sterile, with lid

Designed for cell culture, these dishes have a uniform surface chemistry, created by vacuum gas plasma treatment, which promotes cell attachment. The hydrophilic tissue culture surface contains a variety of negatively charged functional groups that support cell attachment and spreading. The design and frosted rim of the Easy-Grip dish improves handling of small dishes. The ability to pick up a small dish conveniently, without accidentally removing the lid, allows faster working and improves aseptic manipulation.

- Flat and optically clear for distortion-free microscopic visualisation of cells
- Lids designed for optimal gas exchange
- Stacking rings allow for easier stacking and handling
- Cell performance tested to ensure consistent results

Description	Ø (mm)	Height (mm)	Growth area (cm²)	Recommended working volume (ml)	Pk	Cat. No.
TC treated dish, Easy-Grip	35	10	11,7	2,5 - 3,0	500	734-0005
TC treated dish, Easy-Grip	60	15	19,5	6,0 - 7,0	500	734-0007
TC treated dish, standard	60	15	21,3	6,0 - 7,0	500	734-0961
TC treated Centre-Well organ culture dish	60	15	2,9	0,5 - 2,5 ml	500	734-0016
TC treated dish, standard	100	20	58,9	16,0 - 17,5	200	734-0006
TC treated dish, with 20 mm moulded grid	150	25	156,3	45,0 - 50,0	100	734-0013



## Cell culture dishes, treated Corning®





Continued on next page



#### **Optically clear PS**

Available with a choice of treated surface. Corning® CellBIND® surface increases surface wetability for more even and consistent cell attachment. Ultra-Low Attachment dishes feature a covalently bound hydrogel layer that minimises cell attachment, protein absorption and cellular activation.

- With stacking beads to aid handling
- Supplied with vents to provide consistent gas exchange
- Sterilised by gamma radiation
- Certified non-pyrogenic

Description	Ø (mm)	Height (mm)	Growth area (cm²)	Recommended working volume (ml)	Pk	Cat. No.
Dish, CellBIND® surface	35	10	8,0	1,8 - 2,7	210	734-4055
Dish, CellBIND® surface	60	15	21,0	4,2 - 6,3	126	734-4056
Dish, CellBIND® surface	100	20	55,0	11,0 - 16,5	40	734-4057
Dish, TC treated surface	35	10	8,0	1,8 - 2,7	500	734-1698
Dish, TC treated surface	60	15	21,0	4,2 - 6,3	500	734-1699
Dish, TC treated surface, unvented with 2 mm grid	60	15	21,0	4,2 - 6,3	500	734-1703
Dish, TC treated surface	100	20	55,0	11,0 - 16,5	500	734-1815
Dish, TC treated surface, in 6-pack carriers	100	20	55,0	11,0 - 16,5	480	734-1705
Dish, TC treated surface	150	25	148,0	30,4 - 45,6	60	734-1711
Dish, Ultra-Low Attachment surface	60	15	21,0	4,2 - 6,3	20	734-0884
Dish, Ultra-Low Attachment surface	100	20	55.0	11.0 - 16.5	20	734-0885



# Cell culture dishes, untreated Corning®



#### **Optically clear PS**

For applications where cell attachment is not desired.

- With stacking beads to aid handling
- Supplied with vents to provide consistent gas exchange
- Sterilised by gamma radiation
- · Certified non-pyrogenic

Description	Ø (mm)	Growth area (cm²)	Recommended working volume (ml)	Pk	Cat. No.
Cell culture dish, untreated	35	9,0	1,8 - 2,7	500	734-1707
Cell culture dish, untreated	60	21,0	4,2 - 6,3	500	734-1708
Cell culture dish, untreated	100	55,0	11,0 - 16,5	500	734-1709
Cell culture dish, untreated	150	152,0	30,4 - 45,6	60	734-1710



## Cell culture dishes, Nunc™ Thermo Scientific



### PS (except 734-2113\*, made of Permanox™), sterile, with lid

A large range of dishes, which have been tissue culture-treated.

- Optically clear and uniform surface suitable for microscopy
- 60 mm and 35 mm dishes available with grids for cloning or determination of plating efficiency
- Nunclon™∆ certified surface treatment

Description	Ø (mm)	Height (mm)	Growth area (cm²)	Recommended working volume (ml)	Pk	Cat. No.
Culture dish, unvented, without grid	35	10	8,8	3,0	500	734-2041
Culture dish, vented without grid	35	10	8,8	3,0	500	734-2045
Culture dish, vented with grid	35	10	8,8	3,0	500	734-2114
Culture dish, unvented, without grid	60	15	21,5	5,0	400	734-2042
Culture dish, vented, without grid	60	15	21,5	5,0	400	734-2040

Description	Ø (mm)	Height (mm)	Growth area (cm²)	Recommended working volume (ml)	Pk	Cat. No.
Culture dish, vented with grid	60	15	21,5	5,0	400	734-2103
Culture dish, vented without grid*	60	15	20,8	5,0	500	734-2113
Culture dish, unvented with grid	100	20	56,7	12,5	480	734-2112
Culture dish, vented without grid	100	15	56,7	12,5	150	734-2043
Culture dish, vented, without grid	150	20	145,0	35,0	80	734-1403
Culture dish, vented without grid	150	20	145,0	35,0	120	734-1189



## Multidishes, Nunc™ UpCell™ surface Thermo Scientific



The UpCell™ surface is a temperature-responsive cell culture surface that enables harvesting of cells with high viability and intact surface proteins for culture passaging, single-cell analyses and cell transplantation research. The UpCell™ surface enables harvesting of cell sheets and creation of 3D tissue models held together by normal cell junctions and extracellular matrix deposited by the cells.

- No trypsinisation cell surface proteins are preserved
- High cell viability without scraping
- Releases adherent cells by reduction of temperature of the cell culture
- Requires minimal hands-on time

Description	Culture area (cm²)	Recommended working volume (ml)	Pk	Cat. No.
6-well Multidish, UpCell™, vented, with lid, membrane included	9,6	3,0	6	734-2252
12-well Multidish, UpCell™, vented, with lid	3,5	2,0	6	734-2380
24-well Multidish, UpCell™, vented, with lid	1,9	1,0	6	734-2379
48-well Multidish, UpCell™, vented, with lid	1,1	0,5	6	734-2378
96-well Multidish, UpCell™, vented. with lid	0,33	0,2	8	734-2377



## Cell culture dishes, Nunc™ UpCell™ surface Thermo Scientific



### With lid, sterile

Single-use vented dishes feature a temperature-responsive cell culture surface that is ideal for culture passaging, single-cell analyses, and cell transplantation research.

- Surface allows harvesting of cells with intact surface proteins
- High cell viability is achieved with minimal hands-on time and without physical force
- Cell surface proteins are preserved as no trypsinisation required
- Releases adherent cells by reduction of temperature of the cell culture
- Enables harvesting of cell sheets and creations of 3D tissue models held together by normal cell junctions and extracellular matrix

Description	Ø (mm)	Growth area (cm²)	Recommended working volume (ml)	Packed	Pk	Cat. No.
Dish, UpCell™, vented	35	8,8	3,0	5/30	30	734-2253
Dish, UpCell™, vented	60	21,5	5,0	5/30	30	734-2383
Dish, UpCell™, vented with grid	60	21,5	5,0	5/30	30	734-2384
Dish, UpCell™, vented	100	56,7	12,5	1/6	6	734-2381
Dish, UpCell™, vented with grid	100	56,7	12,5	1/6	6	734-2382

## Cell culture dishes, Corning® Primaria™ Corning®



#### PS, sterile, with lid

The gases used to manufacture Corning® Primaria™ contain both oxygen and ammonia, resulting in the incorporation in the surface of a variety of nitrogen-containing functional groups in addition to the negatively charged oxygen containing groups found on traditional tissue culture treated surfaces. The incorporation of nitrogen containing cations has been correlated to attachment and spreading of primary endothelial cells in a clonal cell-growth assay. The complex surface on Corning® Primaria™ products is homogeneous and stable and is used to improve attachment and differentiation of a variety of cell types. The surface chemistry of Corning® Primaria™ products is confirmed by Electron Scanning for Chemical Analysis (ESCA).

- Unique, nitrogen-containing tissue culture surface chemistry improves attachment, spreading and growth for many primary cells or cell lines
- Optically clear and no special storage required
- Convenient, peel open, medical-style packaging

Description	Ø (mm)	Height (mm)	Growth area (cm²)	Recommended working volume (ml)	Pk	Cat. No.
Culture dish, Corning® Primaria™ Easy-Grip dish	35	10	11,8	2,5 - 3,0	200	734-0070
Culture dish, Corning® Primaria™ standard dish	60	15	21,3	6,0 - 7,0	200	734-0071
Culture dish, Corning® Primaria™ standard dish	100	20	58,9	16,0 - 17,5	200	734-0072



## Collagen I culture dishes, Corning® BioCoat™ Corning®



#### PS coated with rat tail collagen type I, sterile, non-pyrogenic

Collagen I, found in most tissues and organs, is most plentiful in dermis, tendon and bone. It is an integral part of the framework that holds cells and tissues together and has been recognised as a useful matrix for improving cell culture. Used *in vitro*, collagen can exert effects on the adherence, morphology, growth, migration and differentiation of a variety of cell types.

- Manufactured in a highly controlled environment and rigorously tested to assure product consistency and performance
- Stable at room temperature when stored in dry conditions

Description	Ø (mm)	Height (mm)	Growth area (cm²)	Recommended working volume (ml)	Pk	Cat. No.
Culture dish, collagen I	35	10	9,6	2,5 - 3,0	20	734-0141
Culture dish, collagen I	35	10	9,6	2,5 - 3,0	100	734-0281
Culture dish, collagen I	60	15	21,3	6,0 - 7,0	20	734-0109
Culture dish, collagen I	60	15	21,3	6,0 - 7,0	100	734-0275
Culture dish, collagen I	100	20	58,1	16,0 - 17,5	10	734-0136
Culture dish, collagen I	100	20	58,1	16,0 - 17,5	40	734-0280

## Poly-lysine culture dishes, Corning® BioCoat™ Corning®



#### PS, coated with poly-lysine

Poly-D-lysine (PDL) and Poly-L-lysine (PLL) are synthetic compounds that enhance cell adhesion and protein absorption by altering surface charges on the culture substrate. Poly-lysine surface treatments support applications including attachment and spreading of a variety of cell lines; cell differentiation and neurite outgrowth; attachment of transfected cell lines; and survival of primary neurons in culture.

Description	Ø (mm)	Height (mm)	Growth area (cm²)	Recommended working volume (ml)	Pk	Cat. No.
Corning® BioCoat™ poly-D	-lysine					
Culture dish, poly-D-lysine	35	10	9,6	2,5 - 3,0	100	734-0417
Culture dish, poly-D-lysine	60	15	21,3	6,0 - 7,0	100	734-0284
Culture dish, poly-D-lysine	100	20	58,1	16,0 - 17,5	40	734-0285
Corning® BioCoat™ poly-L-	-lysine					
Culture dish, poly-L-lysine	35	10	9,6	2,5 - 3,0	100	734-0302
Culture dish. poly-L-lysine	60	15	21.3	6.0 - 7.0	100	734-0301





## Culture dishes for in vitro fertilisation, Falcon<sup>®</sup> Corning<sup>®</sup>



#### Crystal grade PS, sterile, with lid

Pre-tested and certified plasticware for *in vitro* fertilisation (IVF), designed for consistency and ease of use. These dishes have perfectly flat, optically clear surfaces for optimum manipulation and observation of ova and embryos. Lids are designed for aseptic manipulation and consistent venting to maintain humidification.

- Non-embryotoxic, non-pyrogenic and non-cytotoxic
- · Tissue culture treated for a consistent hydrophilic surface
- Sterilised by gamma irradiation
- · Packaged in peel-open, medical-style packaging
- Multi-unit bags have reseal tabs

Description	Ø (mm)	Height (mm)	Growth area (cm²)	Recommended working volume (ml)	Pk	Cat. No.
Culture dish, TC treated, IVF	60	15	21,3	6,0 - 7,0	500	734-0068
Culture dish, TC treated, IVF, centre-well	60	15	2,9	0,5 - 2,5	500	734-0398
Culture dish, IVF, low wall, non treated	50	9	19	-	100	734-2406



# 4-well in vitro fertilisation plates, square, Falcon® Corning®



#### Crystal grade PS, sterile, with lid

Pre-tested and certified plasticware for *in vitro* fertilisation (IVF), designed for consistency and ease of use. These plates have perfectly flat, optically clear surfaces for optimum manipulation and observation of ova and embryos. Lids are designed for aseptic manipulation and consistent venting to maintain humidification.

- Non-embryotoxic, non-pyrogenic and non-cytotoxic
- · Tissue culture treated for a consistent hydrophilic surface
- Sterilised by gamma irradiation
- Packaged in peel-open, medical-style packaging
- Multi-unit bags have reseal tabs

Description	Recommended working volume (ml)	Pk	Cat. No.
Dish, IVF, 4 compartments, individually wrapped	1,8	100	734-0069



### Culture dishes for in vitro fertilisation, Nunc™ Thermo Scientific



#### PS, sterile, flat bottom, with lid

These fully certified dishes are specifically intended for in vitro fertilisation (IVF) use.

- Full batch control of all components in the final product giving full traceability
- Unique certification, based on a 1-cell stage mouse embryo toxicity test, confirms sterility (SAL 10<sup>6</sup>), non pyrogenicity, and that the material has passed USP class VI requirements

Description	Ø (mm)	Height (mm)	Growth area (cm²)	Pk	Cat. No.
Culture dish, IVF, untreated	40	10	8,8	500	391-0109
Culture dish, IVF, untreated	60	15	21,5	400	391-0108



## IVF culture dishes, Costar® Corning®



#### **Optically clear PS**

IVF culture dishes with 20 mm centre well. Inner well holds 3 ml of medium while the outer well holds 10 ml. For research use only.

- 45° slope funnels oocyte/embryo into centre of well
- Stand-off rim on base protects optical surface from scratching
- Treated for optimal cell attachment
- Sterilised by gamma radiation
- Certified non-pyrogenic

Description	Ø (mm)	Pk	Cat. No.
Culture dish, IVF, TC treated, sterile	60	500	734-1542



## BioAssay dishes, 245×245 mm square Corning®



#### PS non treated with lid

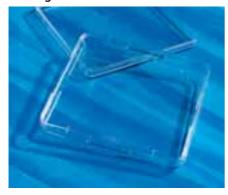
Designed with a stacking bead so that they will stack securely without slipping.

- Compatible with automated colony picking instruments
- Certified non-pyrogenic

Description	Recommended working volume (ml)	Growth area (cm²)	W×D×H (mm)	Pk	Cat. No.
BioAssay dish, square, without handles, internal height 18 mm	100 - 150	500	245×245×25	16	734-1728
BioAssay dish, square, with handles, internal height 18 mm	100 - 150	500	245×245×25	16	734-1731
BioAssay dish, square, without handles, low profile, internal height 12,5 mm	100 - 150	500	245×245×25	20	734-1732



## Bioassay dish, treated Corning®



#### **Optically clear PS**

Treated for optimal cell attachment.

- · With stacking beads to aid handling
- Supplied with vents to provide consistent gas exchange
- Sterilised by gamma radiation
- · Certified non-pyrogenic

Description	Recommended working volume (ml)	Growth area (cm²)	W×D×H (mm)	Pk	Cat. No.
Dish square TC treated	100 - 150	500	245×245×25	16	734-1727



## Bioassay dish, Nunclon™∆ Thermo Scientific



### PS, sterile, with lid

Dish is tissue culture-treated.

- Optically clear and uniform surface suitable for microscopy
- Nunclon™∆ certified

Description	Recommended working volume (ml)	Growth area (cm²)	W×D×H (mm)	Pk	Cat. No.
Bioassay dish, Nunclon™∆, PS without grid or air vent	135	500	245×245×25	16	734-2096



## Bioassay dish for *in vitro* fertilisation, Nunc™ Thermo Scientific



#### PS, sterile, flat bottom, with lid

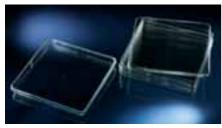
These fully certified dishes are specifically intended for in vitro fertilisation (IVF) use.

- Full batch control of all components in the final product giving full traceability
- Unique certification, based on a 1-cell stage mouse embryo toxicity test, confirms sterility (SAL 10<sup>6</sup>), non-pyrogenicity, and that the material has passed USP class VI requirements

Description	Growth area (cm²)	W×D×H (mm)	Pk	Cat. No.
Bioassay dish, Nunclon™∆ treated, 4 compartments	1,9	66×66×18	120	734-1175



## Bioassay dishes, Nunc™ Thermo Scientific



#### PS, sterile, with lid

Useful for screening large numbers of colonies in cloning experiments. Low profile dishes designed for genomic screening and colony picking.

- Can be used for culturing bacteria and fungi; also suitable in agar diffusion assays
- Can be used as a moisture chamber for incubation of MicroWell™ plates
- Lined with wet filter paper can also be used as an incubation chamber for in situ hybridisation
- Large growth area
- Low profile dish fits robotic instruments

Description	Recommended working volume (ml)	Growth area (cm²)	W×D×H (mm)	Pk	Cat. No.
Bioassay dishes, PS, with lid	225	500	245×245×25	16	734-2179
Bioassay dishes, PS, with lid, low profile	215	478	241×241×20	20	734-1342



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## Chamber slides, Falcon® CultureSlides for in situ analysis Corning®



#### Soda-lime glass slide; PS vessel, lid and tool

Falcon® CultureSlides allow cells to be cultured and then analysed on a glass microscope slide. Cells are grown in a plastic chamber attached to a specially prepared microscope slide. Cells can be fixed and stained in situ without disruption of the cell monolayer.

- Chamber easily and safely removed using the disposable safety removal tool
- Pressure-sensitive, biocompatible, acrylic-adhesive gasket remains with the vessel after removal, not on the slide, facilitating further processing or placement of coverslips
- Blue hydrophobic border defines cell culture areas
- Wells numbered for easy identification
- Trays designed for incubator use

W×L: 25×75 mm with 1,2 mm bevelled edge

Description	Growth area (cm²)	Recommended working volume (ml)	Pk	Cat. No.
CultureSlide, 4-well	1,7	0,7 - 1,25	24	734-0088
CultureSlide, 4-well	1,7	0,7 - 1,25	96	734-0401
CultureSlide, 8-well	0,7	0,3 - 0,5	24	734-0089
CultureSlide, 8-well	0,7	0,3 - 0,5	96	734-0402

Recommended working volume (ml) = per well



## Chamber slides, Corning® BioCoat™ Collagen I CultureSlides Corning®



#### Soda-lime glass slide; PS vessel, lid and tool

Collagen is an integral part of the framework that holds cells and tissues together and has been recognised as a useful matrix for improving cell culture. *In vitro* use of collagen can exert effects on the adhesion, morphology, growth, migration, and differentiation of a variety of cell types.

Corning® BioCoat™ Collagen I CultureSlides allow cells to be cultured and analysed on a slide. Cells are grown in a plastic chamber attached to a prepared slide. Cells can be fixed and stained *in situ* without disruption of the cell monolayer.

- Chamber easily and safely removed using the disposable safety removal tool supplied
- Pressure-sensitive, biocompatible, acrylic-adhesive gasket remains with the vessel after removal, not on the slide, facilitating further processing or placement of coverslips
- Blue hydrophobic border defines cell culture areas
- Wells numbered for easy identification
- Trays designed for incubator use

W×L: 25×75 mm with 1,2 mm bevelled edge

Description	Growth area (cm²)	Recommended working volume (ml)	Pk	Cat. No.
Collagen I CultureSlide, 4-well	1,7	0,7 - 1,25	12	734-0206
Collagen I CultureSlide, 8-well	0,7	0,3 - 0,5	12	734-0241

## Chamber slides, Corning® BioCoat™ Poly-D-Lysine CultureSlides Corning®



#### Glass with PS lid, vessel and safety removal tool

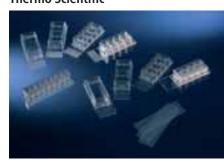
These slides have a uniform application of poly-D-lysine.

Description	Pk	Cat. No.
Poly-D-Lysine CultureSlide, 4-well	12	734-0220
Poly-D-Lysine CultureSlide, 8-well	12	734-0243





### Chamber slides, Nunc™ Lab-Tek™ Thermo Scientific



### PS medium chamber on glass or Permanox™ plastic slide, PS cover, sterile

For viral and mycoplasma testing, chromosome studies, toxicity tests and immunocytology. Permanox $^{\text{TM}}$  is a TC treated plastic surface with minimal fluorescence.

- Cells grow on a standard microscope slide
- No cell transfer needed prior to visualisation/staining
- Upper chamber can be removed when culturing is complete
- Suitable for use with fluorescent labels

Description	Growth area (cm²)	Recommended working volume (ml)	Pk	Cat. No.
Glass				
One chamber	9,4	2,5 - 4,5	16	734-2119
Two chambers	4,2	1,2 - 2,0	16	734-2120
Four chambers	1,8	0,5 - 0,9	16	734-2121
Eight chambers	0,8	0,2 - 0,4	16	734-2122
Sixteen chambers	0,4	0,1 - 0,2	16	734-2127
Permanox™				
Two chambers	4,2	1,2 - 2,0	16	734-2124
Four chambers	1,8	0,5 - 0,9	16	734-2125
Eight chambers	0,8	0,2 - 0,4	16	734-2126





## Chamber slides, Nunc™ Lab-Tek™ II Thermo Scientific



#### PS medium chamber on glass slide, PS lid, sterile

For cell culture, viral and mycoplasma testing, chromosome studies, toxic tests and immunocytology.

- Removable medium chamber of 1, 2, 4 and 8-well configuration, attached to non-fluorescent glass microscope slide
- Rounded corners using biocompatible adhesive
- Inert hydrophobic well border printed on slide
- Superfrost<sup>™</sup> printed writing area
- Treated to ensure excellent cell attachment and growth

Description	Growth area (cm²)	Recommended working volume (ml)	Pk	Cat. No.
One chamber	8,6	2,0 - 4,5	16	734-2047
Two chambers	4,0	1,0 - 2,0	16	734-2048
Four chambers	1,7	0,5 - 1,0	16	734-2049
Eight chambers	0,7	0,2 - 0,5	16	734-2050





## Chamber slides, Nunc™ Lab-Tek™ II CC2™ Thermo Scientific



#### Borosilicate coverglass, PS chamber, sterile

These chamber slides have a chemically coated growth surface on the glass slide which mimics polylysine, providing binding sites optimal for fastidious cells such as neurons.

- $\bullet \ \, \text{Growth surface remains stable without refrigeration} \\$
- Light blue frosted writing area for clear identification
- Slide separator to lift the medium chamber from the slide in in each pack

Description	Growth area (cm²)	Recommended working volume (ml)	Pk	Cat. No.
One chamber	8,6	2,0 - 4,5	16	734-2051
Two chambers	4,0	1,0 - 2,0	16	734-2052
Four chambers	1,7	0,5 - 1,0	16	734-2053
Eight chambers	0,7	0,2 - 0,5	16	734-2054





### Chamber slides, Nunc™ Lab-Tek™ Thermo Scientific



#### Borosilicate cover glass, PS medium chamber, sterile

These chamber slides are designed for confocal image analysis.

- For high power inverted microscopic viewing
- Medium chamber is not removable

Description	Growth area (cm²)	Recommended working volume (ml)	Pk	Cat. No.
One chamber	9,4	2,5 - 4,5	16	734-2056
Two chambers	4,2	1,2 - 2,0	16	734-2058
Four chambers	1,8	0,5 - 0,9	16	734-2060
Eight chambers	0.8	0.2 - 0.4	16	734-2062





### Chamber slides, Nunc™ Lab-Tek™ II Thermo Scientific



#### Borosilicate cover glass, PS medium chamber, sterile

For use with 1, 2, 4 and 8-well configuration Nunc™ Lab-Tek™ II chamber slides.

- Excellent for confocal image analysis
- Optimal for high power inverted microscope viewing
- Chambered coverglass medium chamber is not removable

Description	Growth area (cm²)	Recommended working volume (ml)	Pk	Cat. No.
One chamber	8,6	2,0 - 4,5	16	734-2055
Two chambers	4,0	1,0 - 2,0	16	734-2057
Four chambers	1,7	0,5 - 1,0	16	734-2059
Eight chambers	0,7	0,2 - 0,5	16	734-2061



### Flasks on slides, Nunc™ Thermo Scientific



### Glass (Flaskette), PS (SlideFlask), sterile

For cell culture on a microscope slide. For karyotyping of cells, single cell autoradiography, and single cell immuno-fluorescence.

- PS SlideFlask Nunclon™∆ certified
- SlideFlask is ultrasonically welded to the slide, and individually leak tested

W×D (Flaskette): 20×52 mm; W×D (SlideFlask): 18×50 mm

Description	Growth area (cm²)	Recommended working volume (ml)	Pk	Cat. No.
SlideFlask, PS	9,0	2,5 - 5,0	50	734-2107
Flaskette, glass	10	2,5 - 5,0	16	732-2609



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## Cell culture inserts, Transwell® Corning®





12 mm PC Transwell® insert

24 mm PC Transwell®-Clear insert

Transwell® cell culture inserts are convenient, easy to use permeable support devices for the study of both anchorage-dependent and anchorage-independent cell lines. They are designed to produce a cell culture environment that closely resembles the *in vivo* state.

All Transwell® membranes are compatible with histological fixatives including methanol and formaldehyde. The polyester Transwell® membranes have the best overall chemical resistance. These membranes (but not the PS housings) are compatible with many alcohols, amines, esters, ethers, ketones, oils and some solvents, including many halogenated hydrocarbons and DMSO, but are not recommended for use with strong acids and bases.

The polyester Transwell® membranes do not have as high a pore density as the polycarbonate Transwell® membranes, but have better optical clarity as a result.

- · Allows polarised cells to feed basolaterally and thereby carry out metabolic activities in a more natural fashion
- Self-centred hanging design prevents medium wicking between the insert and outer well
- Permits access to the lower compartment through windows in the insert wall
- Suspended design allows for undamaged co-culturing of cells in the lower compartment
- Available in a range of pore sizes and different membranes to satisfy diverse experimental requirements

#### Transwell® polycarbonate membrane inserts

- 10 µm thick translucent membrane
- Membrane pore sizes ranging from 0,4 µm to 8 µm diameters
- Treated for optimal cell attachment
- Supplied in multiple well plates
- Membrane must be stained for cell visibility

### Transwell®-Clear polyester membrane inserts

- 10 µm thick transparent membrane
- Treated for optimal cell attachment
- Excellent visibility under phase contrast microscopy
- Supplied in multiple well plates

#### Transwell®-COL collagen coated membrane inserts

- Transparent collagen treated PTFE membrane
- Promotes cell attachment and spreading
- Equimolar mixture of types I and III collagen
- Individually packaged
- Multiple well plates included in each case

Description	Pore size (µm)	Culture area (cm²)	Membrane	Membrane Ø (mm)	Pk	Cat. No.
Transwell® polycarbonate	membrane inserts					
Transwell®	0,4	0,33	PC	6,5	48	734-1568
Transwell®	0,4	1,12	PC	12	48	734-1563
Transwell®	0,4	4,67	PC	24	24	734-1567
Transwell®	0,4	44	PC	75	12	734-1571
Transwell®	3,0	0,33	PC	6,5	48	734-1570
Transwell®	3,0	1,12	PC	12	48	734-1564
Transwell®	3,0	4,67	PC	24	24	734-1569
Transwell®	3,0	44	PC	75	12	734-1572
Transwell®	5,0	0,33	PC	6,5	48	734-1573
Transwell®	8,0	0,33	PC	6,5	48	734-1574
Transwell®	8,0	4,67	PC	24	24	734-1576
Transwell®-Clear polyester	r membrane inserts					
Transwell®-Clear	0,4	0,33	Polyester	6,5	48	734-1581
Transwell®-Clear	0,4	1,12	Polyester	12	48	734-1579
Transwell®-Clear	0,4	4,67	Polyester	24	24	734-1577
Transwell®-Clear	3,0	0,33	Polyester	6,5	48	734-1583
Transwell®-Clear	3,0	1,12	Polyester	12	48	734-1580
Transwell®-Clear	3,0	4,67	Polyester	24	24	734-1578

Description	Pore size (μm)	Culture area (cm²)	Membrane	Membrane Ø (mm)	Pk	Cat. No.
Transwell®-COL collag	gen coated membrane insert	s				
Transwell®-COL	0,4	0,33	Collagen coated	6,5	24	734-1594
Transwell®-COL	0,4	1,12	Collagen coated	12	24	734-1592
Transwell®-COL	0,4	4,67	Collagen coated	24	24	734-1590
Transwell®-COL	3,0	0,33	Collagen coated	6,5	24	734-1595
Transwell®-COL	3,0	1,12	Collagen coated	12	24	734-1593
Transwell®-COL	3,0	4,67	Collagen coated	24	24	734-1591



## Cell culture inserts, Snapwell™ Corning®

A modified Transwell® permeable support containing a 12 mm diameter membrane supported by a detachable ring. Once cells are grown to confluence on the Snapwell™ insert, the ring can be placed in a vertical or horizontal diffusion chamber. Packaged in six well plates.

Pore size (µm)	Culture area (cm²)	Membrane	Pk	Cat. No.
0,4	1,12	PC	24	734-1566
0,4	1,12	Clear polyester	24	734-1646



## Cell culture inserts, HTS Transwell® permeable supports and plates Corning®



HTS Transwell® permeable supports and plates are designed for automation and ease of handling.

#### HTS Transwell® 24-well permeable supports

The HTS Transwell® 24-well permeable support has an array of 24 wells with membrane inserts connected by a rigid, robotics-friendly tray that enables all 24 Transwell® supports to be handed in a single unit.

- Choice of either PC membrane with 0,4  $\mu m$  or 3,0  $\mu m$  pore size, or polyester (PET) membrane with 0,4  $\mu m$  pore size
- · Treated for optimal cell attachment
- Individual pack has 2 HTS Transwell®-24 units loaded into two open reservoir trays and two individually wrapped 24-well plates
- Bulk pack has 12 HTS Transwell®-24 units loaded into 24-well plates only, reservoirs may be purchased separately

### HTS Transwell® 96-well permeable support systems and plates

The HTS Transwell® 96-well permeable support has an array of 96 wells with membrane inserts connected by a rigid, robotics-friendly tray that enables all 96 inserts to be handled as a single unit.

- Choice of either polyester (PET) membrane (1,0 µm or 8,0 µm pore sizes) or PC membrane (0,4 µm, 3,0 µm or 5,0 µm pore sizes)
- Large apical and basolateral access ports allow efficient media sampling and facilitate automated or manual access
- · Optimised for automation, with multichannel feeder ports, improved gripping surface, and standard barcodes
- Reservoir plate allows for simultaneous feeding of 96 wells and comes with a removable media stabiliser to reduce the risk of spills during handling
- Receiver plate isolates each well to enable 96 individual assays

Packaging information: The HTS Transwell®-96 systems (0,4 μm PC and 1,0 μm PET) are packaged with the 96-well insert plate in a reservoir plate and includes the 96-well receiver plate with lid. The HTS Transwell®-96 well plates (3.0 μm and 5.0 μm PC, 8.0 μm PET) are packaged with the 96-well insert plate in the 96-well receiver plate with lid. Reservoir plates may be purchased separately.

Description	Pore size (µm)	Culture area (cm²)	Membrane	Pk	Cat. No.
HTS Transwell® 24-well permeable supports					
HTS Transwell®-24, individual	0,4	0,33	PET	2	734-4073
HTS Transwell®-24, bulk	0,4	0,33	PET	12	734-4072
HTS Transwell®-24, individual	3,0	0,33	PC	2	734-1561
HTS Transwell®-24, bulk	3,0	0,33	PC	12	734-1562
HTS Transwell®-24, individual	0,4	0,33	PC	2	734-1559
HTS Transwell®-24, bulk	0,4	0,33	PC	12	734-1560
HTS Transwell® non treated reservoir	-	-	-	48	734-1558
HTS Transwell® 96-well permeable support systems and plates					
HTS Transwell®-96 system, reservoir and receiver plates with 2 lids	0,4	0,14	PC	1	734-4075
HTS Transwell®-96 system, reservoir and receiver plates with 2 lids	0,4	0,14	PC	5	734-4083
HTS Transwell®-96 system, reservoir and receiver plates with 2 lids	1,0	0,14	PET	1	734-4074
HTS Transwell®-96 system, reservoir and receiver plates with 2 lids	1,0	0,14	PET	5	734-4084
HTS Transwell®-96 well plate, receiver plate and lid, individual	3,0	0,14	PC	2	734-4079
HTS Transwell®-96 well plate, receiver plate and lid, bulk	3,0	0,14	PC	8	734-4080
HTS Transwell®-96 well plate, receiver plate and lid, individual	5,0	0,14	PC	2	734-4082
HTS Transwell®-96 well plate, receiver plate and lid, bulk	5,0	0,14	PC	8	734-4081
HTS Transwell®-96 well plate, receiver plate and lid, individual	8,0	0,14	PET	2	734-4071
HTS Transwell®-96 well plate, receiver plate and lid, bulk	8,0	0,14	PET	8	734-4078
HTS Transwell®-96 reservoir plate with lid, tissue culture treated	-	-	-	10	734-4076

VWR

Description	Pore size (µm)	Culture area (cm²)	Membrane	Pk	Cat. No.
HTS Transwell® 96-well permeable support systems and plates					
HTS Transwell®-96 black receiver plate with lid, tissue culture treated	-	-	-	10	734-4114
HTS Transwell®-96 reservoir plate with removable media stabiliser and lid, not treated	-	-	-	10	734-4077
HTS Transwell®-96 white receiver plate with lid, tissue culture treated	-	-	-	10	392-0322



## Cell culture inserts, Costar® Netwell™ Corning®



#### Polyester mesh bottoms attached to PS rings or housing

Netwell™ inserts are used as tissue carriers, supports and strainers of small organs, tissue slices or explants at the air-media interface.

- Handy carrier for immunocytochemical staining of tissue slices
- Provides coarse filtration of tissue homogenates, cell suspensions and microcarriers
- Available in two mesh sizes and diameters
- Supplied sterile and pre-loaded in 6- or 12-well plates
- 24 mm Netwell inserts fit in Corning® 50 ml plastic centrifuge tubes

Description	Packed	Pk	Cat. No.
Membrane Ø 15 mm, mesh size 74 μm	12/plate	48	734-1586
Membrane Ø 15 mm, mesh size 500 μm	12/plate	48	734-1587
Membrane Ø 24 mm, mesh size 74 μm	6/plate	48	734-1588
Membrane Ø 24 mm, mesh size 500 μm	6/plate	48	734-1589

Description	Pk	Cat. No.
Netwell accessories		
Netwell™ reagent tray, black	200	734-1600
Netwell™ reagent tray, white	200	734-1601
Netwell™ carrier kit, 15 mm	8	734-1602
Netwell™ carrier kit, 24 mm	8	734-1603

## HTS 24-multiwell insert system, Falcon®

## Corning®



The Falcon® HTS 24-multiwell insert system is designed to automate many commonly used membrane-based cell assays and increase the productivity and throughput of these assays in the drug discovery process. Available in a choice of membrane pore sizes (1, 3 and 8 µm), 24-multiwell inserts have been successfully used for a variety of applications including permeability studies for oral bioavailability and absorption studies (Caco-2 cells), chemotaxis, cell migration and invasion assays.

- All the benefits of individual cell culture inserts in an automation-friendly format that is compatible with most robotic and fluid handling equipment
- Handle 24 inserts simultaneously, as all 24 inserts are part of a single unit that is compatible with Falcon® 24-well plates and feeder tray

Distance from membrane to bottom of well (mm)	2,0
Effective diameter of membrane (mm)	6,5
Effective growth area in 24-well plate (cm²)	2,0
Effective growth area of membrane (cm²)	0,3
Insert height (mm)	18
Pore density: 1 µm insert (pores/cm²)	1,6×10 <sup>6</sup>
Pore density: 3 µm insert (pores/cm²)	8,0×10 <sup>5</sup>
Pore density: 8 µm insert (pores/cm²)	1,0×10⁵
Suggested media volume in insert (µI)	300 - 500
Suggested media volume in well (μl)	1000 - 4000

Description	Pk	Cat. No.
With feeder tray and lid, 1 μm pore size	1	734-0378
With feeder tray and lid, 1 μm pore size	5	734-0379
With 24-well plate and lid, 3 μm pore size	1	734-0380
With 24-well plate and lid, 3 μm pore size	5	734-0381
With 24-well plate and lid, 8 µm pore size	1	734-0382
With 24-well plate and lid, 8 μm pore size	5	734-0383

Description	Pk	Cat. No.
Accessories		
Feeder tray specifically designed for use with Falcon® 24-multiwell insert systems	5	734-1325

## HTS 96-multiwell insert system, Falcon® Corning®



The Falcon® HTS 96-multiwell insert system is a cell culture insert platform suitable for both manual and robotic screening of compounds in cell-based assays. The system has been tested for its ability to produce a differentiated monolayer of Caco-2, LLC-PK1, and MDCK cells making it an ideal platform for *in vitro* bioavailability and permeability studies. This automation compatible platform is composed of a 1,0 μm pore size PET membrane-based 96-multiwell insert plate, a media feeder tray and a lid. The drop-in baffle for the feeder tray mitigates media sloshing and lowers the risk of contamination.

- Automation compatible design suitable for use with most robots and fluid handling instruments
- Excellent reproducibility the one-piece feeder tray enhances consistency in well-to-well monolayer growth
- Ideal for drug transport studies

Description	Pk	Cat. No.
One insert plate with feeder tray and lid	1	734-0367
Five insert plates with feeder trays and lids	5	734-0368
Five insert plates with 96-square well, angled-bottom plates and lids	5	734-1379
Description	Pk	Cat. No.
Accessories		
Feeder tray, PS, non-treated, designed for use with Falcon® 96-multiwell insert systems	5	736-2024
96-square well, angled-bottom plate, with lid	5	734-1378

## HTS 24-well Multiwell Permeable Support System, Corning® FluoroBlok™ Corning®



The Corning® FluoroBlok™ HTS 24-multiwell insert system contains an automation-friendly, 24-multiwell cell culture membrane insert suitable for both manual and robotic screening of cells or compounds.

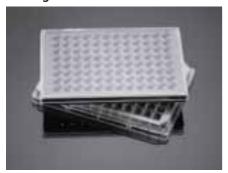
The Corning® FluoroBlok™ insert system is made with an exclusive light-tight PET membrane that effectively blocks the transmission of light from 490 to 700 nm. Fluorescence from labelled cells or compounds present in the top chamber of the insert system is blocked from detection in the bottom chamber by the intervening membrane. Once fluorescently labelled cells or compounds pass through the membrane, they are no longer shielded from the light source and are easily detected with a fluorescence plate reader. The wide blocking range of the FluoroBlok™ membrane allows the flexibility to choose a variety of fluorophores for chemotaxis, cell migration, tumour cell or bacterial invasion, cell signalling, toxicity and permeability studies for oral bioavailability and absorption assays (Caco-2 cells).

- Saves time and labour in chemotaxis, cell migration and invasion assays by automating assay detection with real-time fluorescence
- Rapid data collection without the need for plate washing or manual cell scraping and counting
- Chart migration of cells and molecules in real time without dismantling or destroying the insert
- Handle 24 inserts simultaneously, as all 24 inserts are part of a single unit that is compatible with Falcon® 24-well plates and feeder tray

Distance from membrane to bottom of well (mm)	2,0
Effective diameter of membrane (mm)	6,5
Effective growth area in 24-well plate (cm²)	2,0
Effective growth area of membrane (cm <sup>2</sup> )	0,3
Insert height (mm)	18
Pore density: 3 μm insert (pores/cm²)	8,0×10 <sup>5</sup>
Pore density: 8 μm insert (pores/cm²)	1,0×10 <sup>5</sup>
Suggested media volume in insert (μl)	300 - 500
Suggested media volume in well (μl)	1000 - 4000

Description	Pk	Cat. No.
Corning® FluoroBlok™ HTS 24 multiwell insert systems		
With 24-well plate and lid, 3 μm pore size	1	734-0374
With 24-well plate and lid, 3 μm pore size	5	734-0375
With 24-well plate and lid, 8 μm pore size	1	734-0376
With 24-well plate and lid, 8 μm pore size	5	734-0377
Corning® FluoroBlok™ cell culture inserts, sterile		
3 μm inserts for 24-well plates	48	734-0370
8 μm inserts for 24-well plates	48	734-0371

## HTS 96-well Multiwell Permeable Support System, Corning® FluoroBlok™ Corning®



Corning® FluoroBlok™ HTS 96-multiwell insert system is a cell culture assay platform designed for automation. The one-piece insert housing and fluorescence-blocking microporous membrane (available in 3,0 and 8,0 µm pore sizes) enables increased efficiency, productivity and throughput in the drug discovery process. The receiver plate design minimises crosstalk between wells.

- Standard technology platform allows multiple protocols
- Real time detection without dismantling or destroying the insert
- Eliminates need for manual cell scraping and counting
- Block >99% of the excitation and emission wavelengths of fluorophores commonly used to label cells

Description	Pk	Cat. No.
With 96-well plates and lids, 3,0 µm pore size	1	734-0950
With 96-well plates and lids, 3,0 µm pore size	5	734-0951
With 96-well plates and lids, 8,0 µm pore size	1	734-0952
With 96-well plates and lids, 8,0 μm pore size	5	734-0953
Description	Pk	Cat. No.
Accessories		



736-2024

734-0984

### Cell culture inserts, Falcon® Corning®

96-square well plate, flat bottom

Feeder tray, PS, non-treated, designed for use with Falcon® 96-multiwell insert systems



### PET membranes in PET housing, sterile

Falcon® cell culture inserts are track-etched, low-protein binding, PET membranes with a smooth surface and defined cylindrical pores that transverse the membrane. Available in a wide range of configurations (6-, 12- and 24-well) and a broad selection of pore sizes (0,4, 1,0, 3,0 and 8,0 μm). Larger pore-size membranes are most suitable for investigating chemotaxis, invasion and migration; transparent membranes for visualisation of cells by light microscopy; and high pore-density membranes for maximum diffusion when studying transport, secretion or drug uptake.

- Non-tissue culture treated insert housing prevents growth of cells on the inert walls
- Hanging design facilitates pipetting and allows for co-culture
- Suitable for use with Falcon® cell culture insert companion plates
- Supplied in individual blister packs

Description	Pk	Cat. No.
Transparent PET membrane, 0,4 μm pore size, 1,6×10 <sup>6</sup> pores/cm <sup>2</sup>		
Inserts for 6-well plates	48	734-0032
Inserts for 12-well plates	48	734-0051
Inserts for 24-well plates	48	734-0036
High density, translucent PET membrane, 0,4 μm pore size, 1,0×10 <sup>8</sup> pores/cm <sup>2</sup>		
Inserts for 6-well plates	48	734-0061
Inserts for 12-well plates	48	734-0062
Inserts for 24-well plates	48	734-0063
Transparent PET membrane, 1,0 μm pore size, 1,6×10 <sup>6</sup> pores/cm <sup>2</sup>		
Inserts for 6-well plates	48	734-0040
Inserts for 12-well plates	48	734-0041
Inserts for 24-well plates	48	734-0042
Transparent PET membrane, 3,0 µm pore size, 8,0×10 <sup>5</sup> pores/cm <sup>2</sup>		
Inserts for 6-well plates	48	734-0033
Inserts for 12-well plates	48	734-0052
Inserts for 24-well plates	48	734-0037
High density, translucent PET membrane, 3,0 µm pore size, 2,0×10 <sup>6</sup> pores/cm <sup>2</sup>		
Inserts for 6-well plates	48	734-0034
Inserts for 12-well plates	48	734-0060
Inserts for 24-well plates	48	734-0397
Transparent PET membrane, 8,0 µm pore size, 1×10 <sup>5</sup> pores/cm <sup>2</sup>		
Inserts for 6-well plates	48	734-0035
Inserts for 12-well plates	48	734-0053
Inserts for 24-well plates	48	734-0038



### Cell culture insert companion plates, Falcon® Corning®



#### PS, tissue culture-treated, sterile, non-pyrogenic, with lid

Specifically designed for use with Falcon® or Corning® BioCoat™ cell culture inserts, so that evaporation and contamination due to improper lid fit is eliminated.

In the "Feeding Position" pipette access is improved for fluid handling on the basolateral side. In the "Incubation Position" cell culture inserts remain locked in position in their companion plate wells.

- Reagents can be added guickly and consistently for timed experiments
- Aspiration from the well is easier, reducing the risk of contamination
- Media cannot wick up between the insert and the well wall
- Low-evaporation lid reduces evaporation and contamination

Note: May be used with or without cell culture inserts

Description	Pk	Cat. No.
6-well companion plate	50	734-0065
6-well companion plate (deep well)	4	734-1095
12-well companion plate	50	734-0066
24-well companion plate	50	734-0067

## Invasion chambers, Corning® BioCoat™ Matrigel® Corning®

An in vitro system for assessing the invasive potential of both malignant and normal cells

Corning® BioCoat™ Matrigel® invasion chambers enable studies of metastatic potential of tumour cells; expression of matrix metalloproteinase on the surface of invasive tumour cells; inhibition of metastasis by ECM components or antineoplastic drugs (i.e. Taxol®); altered expression of cell surface proteins in metastatic cells; and invasion of normal cells, such as embryonic stem cells, cytotrophoblasts, and fibroblasts as well as of multiple cell lines.

The Corning® BioCoat™ Matrigel® invasion chamber is an *in vitro* system for the study of cell invasion through the basement membrane. It consists of Falcon® cell culture inserts containing an 8,0 μm pore-size PET membrane coated with a uniform layer of Corning® Matrigel® matrix.

The Corning® BioCoat™ tumour invasion system is an *in vitro* system for the study of tumour cell invasion through the basement membrane. It consists of Corning® FluoroBlok™ multiwell insert plates containing an 8,0 µm pore size Corning® FluoroBlok™ membrane coated with a uniform layer of Corning® Matrigel® basement membrane matrix. The Corning® Matrigel® matrix occludes the pores of the Corning® FluoroBlok™ membrane, blocking non-invasive cells from migrating through the membrane.

- Proven biological performance using Corning® FluoroBlok™ PET membrane coated with Corning® Matrigel® matrix
- Allows for rapid and reproducible quantitation of tumour cell invasion in vitro
- Increase throughput for tumour cell invasion assays
- Allows automation of assays with simplified and non-destructive fluorescence detection
- Saves time and labour screening for prospective anti-metastatic compounds

Quality control	Tested for the ability to allow invasion of HT-1080 cells, an invasive human fibrosarcoma cell line, and to exclude invasion of 3T3 cells, a non-invasive mouse fibroblast cell line  Tested and found negative for bacteria and fungi
Storage and stability	Store at −20 °C in original packaging. Stable for at least 3 months at −20 °C

Description	Pk	Cat. No.
Corning® BioCoat™ Matrigel® invasion chambers		
8,0 µm inserts two 24-well plates	24	734-1047
8,0 µm inserts in four 6-well plates	24	734-1048
Corning® BioCoat™ growth factor reduced (GFR) Matrigel® invasion chambers		
8,0 µm inserts in two 24-well plates	24	734-1049
Corning® BioCoat™ 24-multiwell tumour invasion system		
8,0 μm inserts in one 24-well plate	1	734-1024
8,0 μm inserts in five 24-well plates	5	734-1025
Corning® BioCoat™ 96-multiwell tumour invasion system		
8.0 µm Multiwell insert plate in one 96-well plate	1 KIT	392-2500
8,0 µm inserts in five 96-well plates	5	392-2501



### Angiogenesis system, Corning® BioCoat™ Corning®

The Corning® BioCoat™ Angiogenesis systems facilitate investigation of compound effects on endothelial cell invasion, migration, and tubulogenesis. The availability of these standardised assays has facilitated a better understanding of the molecular mechanism of angiogenesis and simplified the routine use of cell based assays for screening of anti- and pro-angiogenic compounds.

- Address key steps in the angiogenesis process using standardised cell-based assays
- Increase throughput with screening-compatible formats and data acquisition options
- Obtain human umbilical vein endothelial cells pre-qualified for use in the endothelial cell migration assay

#### Corning® BioCoat™ Angiogenesis system: Endothelial Cell Invasion

For evaluation of endothelial cell invasion using real time fluorescence detection in a simplified and reproducible manner.

System includes 24-multiwell insert plate(s) with 3 μm pore size Corning® FluoroBlok™ fluorescence-blocking PET membrane pre-coated with Corning® Matrigel® Matrix, packaged ready-to-use with Falcon® companion plate.

### Corning® BioCoat™ Angiogenesis system: Endothelial Cell Migration

A quantitative and reproducible in vitro model system for examining the effects of prospective compounds on endothelial cell migration.

System includes 24- or 96-multiwell insert plate(s) with 3,0 µm pore size Corning® FluoroBlok™ fluorescence-blocking PET membrane pre-coated with human fibronectin, packaged ready-to-use with Falcon® companion plate.

#### Corning® BioCoat™ Angiogenesis system: Endothelial cell tube formation

An optimised system for screening compounds that modulate endothelial cell tubulogenesis, which saves time and improves reproducibility.

**Delivery information:** System includes 96-well black plate with clear bottom uniformly coated with Corning® Matrigel® Matrix, packaged ready-to-use with Falcon® companion plate.

#### Corning® Human Umbilical Vein Endothelial Cells (HUVEC)

Corning® Human Umbilical Vein Endothelial Cells (HUVEC-2) are derived from single donors and cryopreserved at passage number 2. HUVEC-2 cells have been pre-qualified to assure a robust migratory response to angiogenic factors such as VEGF and FBS. Single donor primary HUVEC-2 cells are suitable for use in combination with Corning® BioCoat™ Angiogenesis systems to provide relevant models for angiogenesis (e.g. cardiovascular, vascular, and wound healing) and cancer research. Corning® Human Umbilical Vein Endothelial Cells have been qualified for use in Corning® BioCoat™ Angiogenesis Endothelial Cell Migration assays and may be used in Corning® BioCoat™ Endothelial Cell Invasion and Tube Formation assays.

Description	Pore size	Pk	Cat. No.
Corning® BioCoat™ Angiogenesis system: Endothelial cell invasion	1		
One 24-multiwell insert plate	3 μm	1	734-1018
Five 24-multiwell insert plates	3 μm	5	734-1019
Corning® BioCoat™ Angiogenesis system: Endothelial cell migratio	on		
One 24-multiwell insert plate	3 μm	1	734-1020
Five 24-multiwell insert plates	3 μm	5	734-1021
One 96-multiwell insert plate	3 μm	1	734-1118
Five 96-multiwell insert plates	3 μm	5	392-2504
Corning® BioCoat™ Angiogenesis system: Endothelial cell tube for	rmation		
One 96-well black/clear bottom Falcon® Optilux microplate	-	1	734-1022
Five 96-well black/clear bottom Falcon® Optilux microplates	-	5	734-1023
Description		Pk	Cat. No.
Human Umbilical Vein Endothelial Cells (HUVEC)			
Human Umbilical Vein Endothelial Cells, HUVEC-2, >5×10 <sup>5</sup> cells		1	734-1120



### Cell culture inserts, Nunc™ Thermo Scientific



For cultivation of most cell types, without matrix coating. Membranes are thermally welded to the polystyrene upper structure. Polycarbonate membranes in larger pore sizes are adaptable to many uses in cell culture including transport studies, toxicity tests, chemotaxis studies and electron microscopy. Membranes are transparent when wet and are suitable for phase contrast and Normanski Optic Systems.

- Treated and quality controlled for cell culture
- Excellent cell attachment and growth
- Non toxic and resistant to most solvents
- Low non specific binding



Description	Culture area (cm²)	Recommended working volume (ml)	Pk	Cat. No.
Polycarbonate membrane, 0,4 μm pore size, 1,5×10 <sup>8</sup> pores/cm <sup>2</sup>				
Inserts pre-packed in 6-well multidishes, 20×25 mm	3,14	1,5	24	734-2240
Inserts pre-packed in 6-well multidishes, 23×34 mm	4,1	1,75	24	734-2235
Inserts pre-packed in 12-well multidishes, 12×18 mm	1,13	1,1	48	734-2232
Inserts pre-packed in 24-well multidishes, 8×13 mm	0,47	0,5	48	734-2239
Polycarbonate membrane, 3,0 μm pore size, 3×10 <sup>6</sup> pores/cm <sup>2</sup>				
Inserts pre-packed in 6-well multidishes, 20×25 mm	3,14	1,5	24	734-2230
Inserts pre-packed in 6-well multidishes, 23×34 mm	4,1	1,75	24	734-2236
Inserts pre-packed in 12-well multidishes, 12×18 mm	1,13	1,1	48	734-2233
Inserts pre-packed in 24-well multidishes, 8×13 mm	0,47	0,5	48	734-2228
Polycarbonate membrane, 8,0 μm pore size, 10 <sup>5</sup> pores/cm <sup>2</sup>				
Inserts pre-packed in 6-well multidishes, 20×25 mm	3,14	1,5	24	734-2231
Inserts pre-packed in 6-well multidishes, 23×34 mm	4,1	1,75	24	734-2237
Inserts pre-packed in 12-well multidishes, 12×18 mm	1,13	1,1	48	734-2234
Inserts pre-packed in 24-well multidishes, 8×13 mm	0,47	0,5	48	734-2229

All Nunc™ Cell Culture Inserts: Recommended working volume, ml = in addition to normal well working volume





## SELECTED FOR YOU

### **Drosophila vials**



For storage, handling and transportation of Drosophila flies.

Manufactured in ISO 9001:2000 certified facility. Narrow and wide vials are manufactured in PP, PS or K-Resin and packaged in bulk or tray formats.

Material	Properties	Autoclavable
Polystyrene (PS)	This resin has glass like clarity, allowing very clear, distortion free viewing of fly gender and behaviour.	No
Polypropylene (PP)	PP is a clear resin and is softer than PS. This is optimal for cost sensitive experiments and clear viewing.	Yes
K-Resin	K-Resin is a premium scratch resistant resin, combining the clarity of PS with the flexibility of PP.	No

Ø ext.×H (mm)	Packed	Pk	Cat. No.
Polystyrene (PS)			
25×95	Bulk	500	734-2255
25×95	Tray	500	734-2259
28,5×95	Bulk	500	734-2262
28,5×95	Tray	500	734-2265
Polypropylene (PP)			
25×95	Bulk	500	734-2254
25×95	Tray	500	734-2258
28,5×95	Bulk	500	734-2261
28,5×95	Tray	500	734-2264
K-Resin			
25×95	Bulk	500	734-2256
25×95	Tray	500	734-2257
28,5×95	Bulk	500	734-2260
28.5×95	Trav	500	734-2263



# Sterile containers, Falcon® Corning®



### PP, sterile, with PE lid

Convenient, single-use containers for collection, transport and storage of a wide variety of specimens.

- Moulded-in graduations for easy measurement
- Inert and chemically resistant to commonly used laboratory reagents at room temperature

Capacity (ml)	Pk	Cat. No.
110	100	391-0020
110	500	392-0298
220	100	391-0023

Description	Pk	Cat. No.
Accessories		
Lids for Falcon® sterile sample container 110 and 220 ml	500	392-0299



### **Erlenmeyer flasks** Corning®







### Optically clear PC

Corning® baffled and plain Erlenmeyer flasks are ideal for shaker culture applications and storage.

- $\bullet$  Baffled or plain bottom options in all sizes (125 ml to 3 l)
- Moulded-in graduations for accuracy
- Vent cap option for continuous gas exchange while ensuring sterility and preventing leakage
   Individually packaged and radiation sterilised for ease of use
- Certified non-pyrogenic

Capacity	Сар	Neck	Pk	Cat. No.
Baffled bottom Erlenmeyer flasks				
125	Vented	Ø 26 mm	50	734-4201
125	Plug seal	Ø 26 mm	50	734-4200
250	Vented	Ø 31 mm	50	734-4203
250	Plug seal	Ø 31 mm	50	734-4202
500	Vented	Ø 43 mm	25	734-4197
500	Plug seal	Ø 43 mm	25	734-4204
1000	Vented	Ø 43 mm	25	734-4199
1000	Plug seal	Ø 43 mm	25	734-4198
2000	Vented	Ø 48 mm	6	734-1905
3000 ml (Fernbach)	Vented	Ø 70 mm	4	734-1903
Plain bottom Erlenmeyer flasks				
125	Vented	Ø 26 mm	50	734-1885
125	Plug seal	Ø 26 mm	50	734-1832
250	Vented	Ø 31 mm	50	734-1886
250	Plug seal	Ø 31 mm	50	734-1820
500	Vented	Ø 43 mm	25	734-1887
500	Plug seal	Ø 43 mm	25	734-1833
1000	Vented	Ø 43 mm	25	734-1889
1000	Plug seal	Ø 43 mm	25	734-1888
2000	Vented	Ø 48 mm	6	734-1904
3000 ml (Fernbach)	Vented	Ø 70 mm	4	734-1902





### Media bottles with cap









#### PS, PC or PETG, with PP screw cap, sterile

VWR Collection disposable, round, Easy Grasp media bottles have been designed for storage of sterile solutions, such as tissue culture media, serum and buffers. These bottles are available in three low extractable plastics: polycarbonate which can withstand up to three autoclave cycles and offers good alcohol resistance; polystyrene for general purpose cell culture aqueous solutions; and PETG for most general laboratory solution storage.

- Sloped design improves bottle stability when placed on the work surface
- Narrow bottle shoulder combined with moulded finger grips improves the ability to securely grip the bottle with gloved hands
- Easy Grasp bottle cap facilitates uncapping, tightening and bottle stacking, as well as providing a convenient gripping surface while transporting

Manufactured with class VI materials in a ISO 13485 facility

Capacity (ml)	Pk	Cat. No.
PS bottles with PP cap, sterile		
250	24	391-0283
500	24	391-0284
1000	24	391-0286
PC bottles with PP cap, sterile		
250	24	391-0297
500	24	391-0298
1000	24	391-0299
PETG bottles with PP cap, sterile		
250	24	391-0294
500	24	391-0295
1000	24	391-0296
PS bottles with PP cap, non sterile		
250	24	391-0317
500	24	391-0318
1000	24	391-0319
PC bottles with PP cap, non sterile		
250	24	391-0321
500	24	391-0322
1000	24	391-0323
PETG bottles with PP cap, non sterile		
250	24	391-0314
500	24	391-0315
1000	24	391-0316







### Media bottles with cap



#### PC, autoclavable, narrow mouth bottles with standard PP caps

VWR Collection media bottles are an ideal replacement for all borosilicate glass bottles. They are specifically designed for every laboratory application requiring terminal sterilisation (autoclaving), storage, transportation, and production of laboratory biological fluids. The bottles are available in square and round shapes to accommodate various packaging needs.

The closure system is guaranteed leakproof and the seal ring allows for convenient shrink-wrapping of the caps. Each bottle is carefully produced and quality controlled for uniform wall thickness, clarity, graduation, and leakproof closure.

Optional septum cap or vented cap with PTFE membrane is also available.

- Ideal for steam sterilisation
- Safe and shatterproof
- Chemically inert

Capacity (ml)	Description	Thread	Pk	Cat. No.
125	Clear, octagonal	38-430	24	215-2203
250	Clear, octagonal	38-430	24	215-2204
500	Clear, octagonal	38-430	12	215-2205
1000	Clear, octagonal	38-430	12	215-2206
500	Clear, round	38-430	12	215-2210
1000	Clear, round	38-430	12	215-2211
300	Clear, round	38-430	96	215-2924



### Diagnostic bottles, sterile, Nalgene® Thermo Scientific



#### **Clear PETG with white HDPE closures**

Ideal for sampling, storage and shipment of reagents or buffer solutions.

Capacity (ml)	Cap size	Pk	Cat. No.
5	20-415	100	391-0074
10	20-415	100	391-0075
20	20-415	100	391-0076



### Media bottles, square, sterile, Nalgene® **Thermo Scientific**



#### PETG bottle with HDPE screw closure

An inexpensive alternative to glass bottles for storage and transport of media, these heavy walled, square, media bottles are transparent and graduated.

- Leakproof closure, break-resistant and durable
- Reduced permeability to carbon dioxide and oxygen
- Bottles and closures are radiation sterilised and non-pyrogenic to eliminate costly washing, depyrogenation and autoclaving steps
- Heat-shrink band around closure and neck provides tamper-evident seal
- 2 I size has moulded in hand grips and a 53 mm white closure

Capacity (ml)	Height (mm)	Neck I-Ø (mm)	Thread	Pk	Cat. No.
30	63	14	20-415	96	215-6700
60	83	18	24-415	96	391-7122
125	108	28	38-430	48	391-7123
250	145	28	38-430	48	391-7124
500	178	28	38-430	24	391-7125
1000	219	28	38-430	24	391-7126
2000	271	39	53B	12	391-7127



### Culture media bottles, square, sterile, Nalgene® **Thermo Scientific**



An inexpensive alternative to glass bottles for storage and transport of media. Available with or without a natural HDPE screw cap closure. The caps for the 30 to 1000 ml bottles are a natural off-white colour. The cap for the 2000 ml bottle is white. Bottles and closures are not autoclavable. Packaged in shrink-wrapped trays.

- Leakproof closure, break-resistant and durable
- Transparency and reduced permeability to carbon dioxide and oxygen allow media storage up to 6 months
- Bottles and closures are radiation sterilised and non-pyrogenic

Capacity (ml)	Description	Neck I-Ø (mm)	W×D×H (mm)	Thread	Pk	Cat. No.
30	With screw caps	14	38×38×64	20-415	280	216-0306
60	With screw caps	18	41×41×83	24-415	200	216-0307
125	With screw caps	28	54×54×110	38-430	96	216-0308
250	With screw caps	28	61×61×146	38-430	60	216-0309
500	With screw caps	28	74×74×177	38-430	40	216-0310
1000	With screw caps	28	94×94×220	38-430	24	216-0311
2000	With screw caps	39	116×116×264	53B	12	216-0312
30	Without screw caps	14	38×38×64	20-415	280	216-0379
60	Without screw caps	18	41×41×83	24-415	200	216-0380
125	Without screw caps	28	54×54×110	38-430	96	216-0381

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Capacity (ml)	Description	Neck I-Ø (mm)	W×D×H (mm)	Thread	Pk	Cat. No.
250	Without screw caps	28	61×61×146	38-430	60	216-0382
500	Without screw caps	28	74×74×177	38-430	40	216-0383
1000	Without screw caps	28	94×94×220	38-430	24	216-0384



### Media bottles, square, sterile Wheaton



#### PET bottle with white PE cap

These bottles offer the clarity of glass, the strength of plastic and a space saving design.

- Tested for pH stability, temperature durability, cloning efficiency and cytotoxicity
- No-drip pour lip allows cleaner, faster and easier pouring
- Permanent moulded-in graduations provide volume determination at a glance
- Lightweight for more economical shipping and handling
- 20% headspace for additives

**Delivery information:** Supplied with caps pre-attached, sterile and shrink-wrapped.

Capacity (ml)	W×D×H (mm)	Pk	Cat. No.
125	53×53×99	48	215-8320
500	75×75×175	24	215-8321





## Storage bottles, square, polycarbonate Corning®



#### PC. square

These storage bottles are easier to handle, require less space on the shelf or in the autoclave, and are ideal for mixing, sampling and storage.

- More break-resistant than other glass or plastic bottles
- Screened white enamel graduations are easier to see than moulded graduations
- Large white marking spot for easier identification
- Bottles can be autoclaved once at 121 °C and 15 psi (repeated autoclaving weakens PC and is not recommended)
- Can be stored at -80 °C

Capacity (ml)	Cap size (mm)	Packed	Pk	Cat. No.
150	45	1/bag, 24 bags/case	24	734-4205
250	45	1/bag, 24 bags/case	24	734-4206
500	45	1/bag, 24 bags/case	24	734-4207
1000	45	1/bag, 24 bags/case	24	734-4208



## Storage bottles, polystyrene Corning®



Easy Grip style



Traditional style

PS

Disposable polystyrene bottles for storage of media, buffers and other aqueous solutions.

- Low profile, easy grip style has sides that facilitate handling
- Plug seal caps (45 mm) provide an airtight seal and help minimise the risk of contamination
- Bottles can be used with Corning® vacuum filter systems

• Sterile, certified non-pyrogenic

Capacity (ml)	Cap size (mm)	Packed	Pk	Cat. No.
Corning® Easy Grip style storage bottles				
150	45	2/pack, 12 packs/case	24	734-1897
250	45	2/pack, 12 packs/case	24	734-1824
500	45	2/pack, 12 packs/case	24	734-1825
1000	45	2/pack, 12 packs/case	24	734-1847
Costar® traditional style storage bottles				
125	45	1/pack, 24 packs/case	24	700-1786
250	45	1/pack, 12 packs/case	12	700-1785
500	45	1/pack, 12 packs/case	12	700-1787
1000	45	1/pack, 12 packs/case	12	700-1783



## Culture tubes Corning®



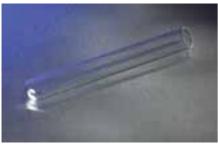
### **Optically clear PS**

Culture tubes with threaded plug seal caps.

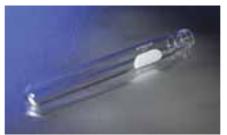
- TC treated tubes supplied racked
- Untreated tubes provided bulk packed
- Sterilised by gamma radiation
- Certified non-pyrogenic

Capacity (ml)	Description	Pk	Cat. No.
15	Culture tubes, untreated	500	734-1697
15	Culture tubes, TC treated	500	734-1701

# Culture tubes, disposable, PYREX® Corning®







734-4232



734-4240

These disposable PYREX® culture tubes are made from borosilicate glass to reduce pH changes and contaminants potentially leached from soda-lime glass.

- Choice of round bottom or flat bottom
- Available with or without a white marking spot
- Designed for both tissue culture and general bacteriological work
- Available with or without cap threads

Ø×L (mm)	Capacity (ml)	Thread	Packed	Pk	Cat. No.
Round bottom, rimless culture tub	es				
10×75	4,0	-	250/pack, 4 packs/case	1.000	734-4221
12×75	6,0	-	250/pack, 4 packs/case	1.000	734-4222
13×100	10,0	-	250/pack, 4 packs/case	1.000	734-4223
15×85	11,0	-	250/pack, 4 packs/case	1.000	734-4224
16×100	15,0	-	250/pack, 4 packs/case	1.000	734-4225
16×125	19,0	-	250/pack, 4 packs/case	1.000	734-4226
16×150	23,0	-	250/pack, 4 packs/case	1.000	734-4227
18×150	28,5	-	250/pack, 2 packs/case	500	734-4228
20×150	36,0	-	250/pack, 2 packs/case	500	734-4229
Round bottom, culture tubes with	thread and white marking spot				
13×100	7,5	13-415*	250/pack, 4 packs/case	1.000	734-4230
16×100	11,5	15-415*	250/pack, 4 packs/case	1.000	734-4232
16×125	15,5	15-415*	250/pack, 4 packs/case	1.000	734-4231

Continued on next page



Ø×L (mm)	Capacity (ml)	Thread	Packed	Pk	Cat. No.
Round bottom, culture tubes	s with thread and white marking	g spot			
16×150	19,0	15-415*	250/pack, 4 packs/case	1.000	734-4233
20x125	24,0	18-415*	250/pack, 2 packs/case	500	392-0216
20×150	30,0	18-415*	250/pack, 2 packs/case	500	734-4235
Round bottom, culture tubes	s with thread, without marking	spot			
13×100	7,5	13-415*	250/pack, 4 packs/case	1.000	734-4239
16×100	11,5	15-415*	250/pack, 4 packs/case	1.000	734-4240
16×125	15,0	15-415*	250/pack, 4 packs/case	1.000	734-4241
16×150	19,0	15-415*	250/pack, 4 packs/case	1.000	734-4242
20×125	24,0	18-415*	250/pack, 2 packs/case	500	734-4243
20×150	30,0	18-415*	250/pack, 2 packs/case	500	734-4244
Flat bottom, culture tubes w	ith thread, without marking spo	ot			
16×125	17	15-415*	250/pack, 4 packs/case	1.000	734-4236
16×100	11,5	15-415*	250/pack, 4 packs/case	1.000	734-4237
19,5×145	29,5	18-415*	250/pack, 2 packs/case	500	734-4238
c 1		71 1	ued.	N	C ( N
Cap colour	Material	Thread	With	Pk	Cat. No.
Screw caps with PTFE liner	al II	12.115	DEED II	200	
Black	Phenolic	13-415	PTFE liner	288	212-7527
Black	Phenolic	15-415	PTFE liner	288	212-7528
Black	Phenolic	18-415	PTFE liner	192	212-7529
Screw caps with rubber line					
Black	Phenolic	13-415	rubber liner	288	212-0442
Black	Phenolic	15-415	rubber liner	288	212-0443
Black	Phenolic	13-415	rubber liner	1.000	734-4255
Black	Phenolic	15-415	rubber liner	1.000	734-4256
Black	Phenolic	18-415	rubber liner	1.000	734-4257

<sup>\*</sup>Screw caps sold separately

### Round bottomed test tubes, Falcon® Corning®



For reliable containment of laboratory fluid samples.

PP tubes: For applications requiring greater thermal and chemical stability

PS tubes: For procedures requiring high optical clarity

- Widely used and referenced in laboratory protocols
- Dual-position snap caps with heavier gauge walls provide a secure, positive seal
   Specialised tube for flow cytometry applications
   Cell strainer cap tube has a 35 µm cell strainer mesh incorporated into cap

Capacity (ml)	Length (mm)	Ø ext. (mm)	Сар	Description	Material	Packed	Sterile	Pk	Cat. No.
5	75	12	without cap	-	PP	1000/pk	-	1.000	391-0000
5	75	12	Snap-cap	-	PS	individually wrapped	+	500	734-0436
5	75	12	without cap	-	PS	1000/pk	-	1.000	734-0000
5	75	12	without cap	-	PS	125/pk	+	1.000	734-0442
5	75	12	without cap	-	PP	125/pk	+	1.000	525-0123
5	75	12	Snap-cap	-	PS	125/pk	+	1.000	734-0443
5	75	12	Snap-cap	-	PS	25/pk	+	500	734-0445
5	75	12	Snap-cap	-	PP	25/pk	+	500	734-0447
5	75	12	Cell strainer cap	for flow cytometry	PS	25/pk	+	500	734-0001
8	100	13	screw cap	-	PS	125/pk	+	1.000	734-0439
14	100	17	Snap-cap	-	PS	individually wrapped	+	500	734-0435
14	100	17	Snap-cap	-	PP	individually wrapped	+	500	734-0438
14	100	17	without cap	-	PS	125/pk	+	1.000	734-0989
14	100	17	without cap	-	PP	125/pk	+	1.000	734-0985
14	100	17	Snap-cap	-	PS	125/pk	+	1.000	525-0122
14	100	17	Snap-cap	-	PS	25/pk	+	500	734-0444
14	100	17	Snap-cap	-	PP	25/pk	+	500	734-0446
16	125	16	screw cap	-	PS	125/pk	+	1.000	734-0986
16	125	16	screw cap	-	PS	individually wrapped	+	500	734-0440
19	150	16	screw cap	-	PS	individually wrapped	+	500	734-0441



### Cell culture tubes, Nunclon™∆ Thermo Scientific



### PS with PE caps, sterile

Round bottom tubes with screw or push-on cap for standard cell culture, or flat-sided tubes for the culture of adherent cells.

- Flat side allows easy microscopy a coverslip can be used in the tube
- Medium retained in the flat-sided tube in the horizontal position
- Excellent optical quality
- Certified surface treatment for optimal cell attachment and growth

Capacity (ml)	Description	Pk	Cat. No.
7	Round tubes with push-on cap	600	734-2036
7	Round tubes with screw cap	600	734-2037
3	Flat-sided tubes with screw cap	450	734-2068

### Sample tubes, disposable, Nunc™ Thermo Scientific



#### PS

PS tubes are suitable for a broad range of applications.

- Graduation marked
- PS tubes are transparent
- Stoppers sold separately

Length (mm)	Ø ext. (mm)	Description	Material	Sterile	Pk	Cat. No.
70	11	Round bottom	PS	-	3.600	734-0493
110	17	Conical bottom	PS	-	1.800	525-0060
					Pk	Cat. No.
oes 11 mm external diame	eter				3.600	391-8056
oes 12 mm external diame	eter				3.000	732-2680
oes 15 mm external diame	eter				2.400	391-8062
	70 110 bes 11 mm external diameses 12 mm external diame	70 11	70 11 Round bottom 110 17 Conical bottom  bes 11 mm external diameter les 12 mm external diameter	70 11 Round bottom PS 110 17 Conical bottom PS  bes 11 mm external diameter  ses 12 mm external diameter	70 11 Round bottom PS - 110 17 Conical bottom PS -  ess 11 mm external diameter  ess 12 mm external diameter	70         11         Round bottom         PS         -         3.600           110         17         Conical bottom         PS         -         1.800           Pk           sees 11 mm external diameter         3.600           sees 12 mm external diameter         3.000



### **ALL YOU NEED FOR CELL CULTURE**

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### Stirred reactor, GL 45 DURAN Group



#### DURAN®, borosilicate glass, PP, PTFE, PEEK, stainless steel

The DURAN® stirred reactor is ideal for the widest possible range of mixing processes in laboratories, e.g. mixing liquids or dissolving solids. The connections available permit introduction of other media into the bottle or to remove media during mixing. The whole assembly is autoclavable, so that it can be used in biological applications, such as simple fermentation processes. With the aid of components from the DURAN® connection system extra media bottles can be connected or sterile pressure compensation is possible.

- Significantly improved mixing compared to standard magnetic stirring bar
- Drive using standard magnetic stirrers
- Variable stirrer shaft, can be used for 500 ml and 1000 ml DURAN® GL 45 laboratory bottles
- Can be used up to 500 rpm
- Parts in contact with media conform fully to FDA requirements
- Temperature resistant up to +140 °C

Description	Pk	Cat. No.
Reactor, stirred, GL 45, incl. 500 ml DURAN® GL 45 bottle, folding magnetic stirrer and GL 45 PP cap with 2×GL 14 ports, 2×GL 14 PBT caps red	1	215-2359
Reactor, stirred, GL 45, incl. 1000 ml DURAN® GL 45 bottle, folding magnetic stirrer and GL 45 PP cap with 2×GL 14 ports, 2×GL 14 PBT caps red	1	215-2360
Folding magnetic stirrer for GL 45 stirred reactor, incl. shaft	1	215-2358
Spare screw cap 2-ports for GL 45 stirred reactor (excl. stirrer) with GL 14 screw cap (PP, blue)	1	215-2357



Cat. No.

## Reactor, stirred, GLS 80 thread DURAN Group



### DURAN®, PP, PTFE, PEEK, Stainless Steel

The GLS 80 stirred reactor is suitable for a wide range of laboratory mixing processes. The connections provided permit addition or removal of media from the bottle during the mixing process. The whole assembly can be autoclaved and is therefore suitable for use in biological applications. By using components from the GLS 80 connection system, an additional media bottle (OD hose: 1,6 - 12,0 mm) can be connected or a sterile pressure equaliser attached. Drive for the stirrer is provided by a standard commercial magnetic stirrer. The variable agitator shaft can be used in DURAN® GLS 80 laboratory glass bottles (1000 and 2000 ml) and provides notably improved mixing in comparison with standard magnetic stirring bars. The agitating element is exchangeable and use up to 500 rpm is possible. Typical applications: Mixing of liquids, dissolving of solids, simple fermentation processes.

- Parts in contact with media conform fully to FDA requirements
- The agitating element is exchangeable
- With the aid of components from the DURAN® connection system extra media bottles can be connected or a sterile pressure release is possible

Reactor cap, stirred, stirrer anchor type, magnetic, complete with shaft, connection and screw cap	1	215-2468
Reactor, stirred, anchor type, magnetic, complete with GLS 80 bottle 1 L, GL 14 screw cap (PP, blue), 2×GL14 screw cap (PBT red), 2×GL18 screw cap (PBT red)	1	441-0550
Reactor, stirred, anchor type, magnetic, complete with GLS 80 bottle 2 L,GL 14 screw cap (PP, blue), 2×GL14 screw cap (PBT red), 2×GL18 screw cap (PBT red)	1	441-0551
Description	Pk	Cat. No.
Accessories		
Stirrer impeller type, magnetic, for GLS 80 stirred reactor	1	215-2473
Stirrer anchor type, magnetic, for GLS 80 stirred reactor	1	215-2474
Spare screw cap for GLS 80 stirred reactor, PP blue/grey	1	215-2469
Spare shaft for GLS 80 stirred reactor, stainless steel, incl. PEEK connection	1	215-2470

Description



### Cell culture flasks, double side arm, Celstir® Wheaton



#### Borosilicate glass flask, PTFE and glass impeller assembly, PTFE and silicone lined top cap

Double side arm Celstir® flasks are ideal for microcarrier and suspension cultures such as insect cells, hybridomas and adapted cell lines.

- Adjustable paddle blade impeller allows better mixing
- Impeller does not protrude through the top cap, thereby maximising incubator space and reducing the risk of contamination
- Addition of the bottom dimple to flasks 125 ml and larger improves circulation and reduces the accumulation of cells in the centre of the flask
- Flasks 500 ml or larger have a 45 mm side arm to be used as an air vent, media inlet or outlet, innoculation port, pH probe inlet, or other application

Capacity (ml)	Neck	Ø×H (mm)	Pk	Cat. No.
25	Centre neck 38 - 430, side arm 15 - 415	38×122	1	734-3006
50	Centre neck 38 - 430, side arm 15 - 415	38×141	1	734-3007
125	Centre neck 51 - 400, side arm 33 - 430	65×155	1	734-3008
250	Centre neck 51 - 400, side arm 33 - 430	85×175	1	734-3009
500	Centre neck 100 - 400, side arm 45 mm	110×190	1	734-3010
1000	Centre neck 100 - 400, side arm 45 mm	130×250	1	734-3011
3000	Centre neck 100 - 400, side arm 45 mm	178×341	1	734-3012
6000	Centre neck 100 - 400, side arm 45 mm	258×404	1	734-3013
8000	Centre neck 100 - 400, side arm 45 mm	293×445	1	734-3014

### Small bottle bench top roller culture system Wheaton



This conventional type roller culture equipment is designed to roll vessels 108 to 121 mm in diameter and up to 290 mm long.

- Compact unit well suited for research work
- Two outside rollers can be moved inward to accommodate bottles as small as 75 mm in diameter
- Each deck can accommodate two vessels (vessels not supplied)

Power: 230 V, 50/60 Hz, 35 W

Bottle speed: 0,1 to 3,8 rpm (based on 110 mm bottle)

W×D×H: 320×325×180 mm

Weight: 8 kg

Warning: Use in an environment rich in carbon dioxide might necessitate more frequent replacement of motor brushes. Not to be used in temperatures exceeding  $+40\,^{\circ}$ C.

Description	Pk	Cat. No.
Single deck roller apparatus, UK plug	1	734-1168
Description	Pk	Cat. No.
Accessories		
Deck kit for small bottle roller culture system	1	734-1170



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## Spinner flasks, disposable Corning®









1 I and 3 I flasks with accessories

### ISO 10993 compliant PS vessel, 1 I and 3 I impellers made of ISO 10993 compliant PP

These disposable spinner flasks are supplied ready-to-use with paddle and integrated magnet, eliminating the need for time-consuming assembly, or cleaning and reassembly. They are comparable to conventional glass spinner flasks for growth of suspension cell lines and any attachment-dependent cultures using microcarrier beads.

- Paddle size and height is optimised for each vessel size
- Each spinner flask system assures a clean, sterile unit no risk of detergent residue or contamination
- Integrated magnet provides smooth, even rotation at required speeds on slow-speed stirrers
- Heat build-up in the vessel is reduced by means of a specially designed flange that raised the vessel off the stir-plate surface for the 125 ml and 500 ml flasks only

Description	Capacity (ml)	Сар	Neck	No. of side arms	Recommended working volume (ml)	Ø×H (mm)	Pk	Cat. No.
Flasks 125 ml with two solid caps on the side arms	125	solid cap	centre neck 70 mm Ø, side arm neck thread GL 25	2	30-75	63,5×145	12	734-4049
Flasks 500 ml with two solid caps on the side arms	500	solid cap	centre neck 100 mm Ø, side arm neck thread GL 45	2	100-300	87,3× 203,2	12	734-4050
Flasks 1000 ml with two solid caps on the side arms	1000	solid cap	side arm necks thread GL 45	2	300-1000	137×245	6	734-4097
Flasks 3000 ml with two solid caps on the side arms	3000	solid cap	side arm necks thread GL 45	2	1000-3000	188×259	4	734-4099
Flasks 500 ml with two solid caps on the side arms	500	vented cap	centre neck 100 mm Ø, side arm neck thread GL 45	2	100-300	87,3× 203,2	12	392-0309
Flasks 1000 ml with two solid caps on the side arms	1000	vented cap	side arm necks thread GL 45	2	300-1000	137×245	6	734-2289
Flasks 3000 ml with two solid caps on the side arms	3000	vented cap	side arm necks thread GL 45	2	1000-3000	188×259	4	734-2290
Flasks 1000 ml, pre- assembled, with one solid cap and one aseptic transfer cap on side arms*	1000	-	side arm necks thread GL 45	2	300-1000	137×245	6	734-4103
Flasks 3000 ml with one solid cap and one aseptic transfer cap on side arms*	3000	-	side arm necks thread GL 45	2	1000-3000	188×259	4	392-0308

Description	Pk	Cat. No.
Accessories for Corning spinner flasks		
Side arm aseptic transfer cap, dip tube with 0,2 μm vent, male luer lock, for 500 ml spinner flask	2	734-4101
Side arm aseptic transfer cap, dip tube with 0,2 µm vent, male luer lock, for 1000 ml spinner flask	2	734-4098
Side arm aseptic transfer cap, dip tube with 0,2 μm vent, male luer lock, for 3000 ml spinner flask	2	734-4100
Vent cap. 0.2 µm vent, for 500, 1000 and 3000 ml spinner flasks	4	734-4102

<sup>\*</sup>with accessory attached





## Roller bottles Corning®





### Virgin PS, sterile

Roller bottles available with smooth or ribbed surface design for expanded culture area. All bottles are treated for optimal cell attachment. The Corning® CellBIND® surface enhances cell attachment under difficult conditions, such as reduced-serum or serum-free medium, resulting in higher cell yields. All bottles are graduated, unless otherwise stated.

- One piece seamless contruction
- All bottles have printed lot numbers to aid product traceability
- Sterilised by gamma radiation
- Certified non-pyrogenic
- Ribbed design provides twice the surface area with the same exterior dimensions

Note: Corning recommends 0.2 to 0.3 ml of medium per cm<sup>2</sup> of growth area, and setting roller rack speeds to provide 0.5 to 1.0 rpm.

Description	Growth area (cm²)	Ø ext.×H (mm)	Packed	Pk	Cat. No.
Roller bottles					
TC surface, plug seal cap, without graduations	490	111×173	2 per bag, 40 per case	40	734-1702
CellBIND® surface, Easy Grip cap	850	117×271	2 per bag, 40 per case	40	734-0095
TC surface, Easy Grip cap	850	117×271	2 per bag, 40 per case	40	734-1720
TC surface, Easy Grip Vent cap	850	117×271	2 per bag, 40 per case	40	734-1730
CellBIND® surface, Easy Grip Vent cap	850	117×271	2 per bag, 40 per case	40	734-4190
TC surface, Easy Grip cap	850	117×271	5 per bag, 40 per case	40	392-0307
TC surface, Easy Grip cap	850	117×271	20 per bag, 20 per case	20	734-1729
TC surface, Easy Grip cap	850	117×271	22 per bag, 44 per case	44	734-4189
CellBIND® surface, Easy Grip cap	850	117×271	22 per bag, 44 per case	44	734-4191
TC surface, Easy Grip cap	1750	117×528	10 per bag, 20 per case	20	734-1714
Expanded surface roller bottles					
TC surface, Easy Grip cap	1700	117×271	2 per bag, 40 per case	40	734-1870
TC surface, Easy Grip cap	1700	117×271	5 per bag, 40 per case	40	392-0286
CellBIND® surface, Easy Grip cap	1700	117×271	20 per bag, 20 per case	20	734-0096
TC surface, Easy Grip cap	1700	117×271	20 per bag, 20 per case	20	734-1884
TC surface, Easy Grip Vent cap	1700	117×271	20 per bag, 20 per case	20	734-1898
Description				Pk	Cat. No.
Caps for roller bottles					
Roller bottle caps, PE, Easy Grip, inc	lividually wrapped			100	734-1859
Roller bottle caps, PE, Easy Grip Ver	nt, individually wrapped			300	734-1883



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## Cell culture chambers, Corning® CellSTACK® Corning®



#### PS, sterile

The Corning® CellSTACK® culture chambers are available in five sizes and with three different surface treatments.

- Two 26 mm diameter filling ports allow direct access to chamber bottom providing greater flexibility for sterile filling and emptying by pouring, pipetting or via tubing in a fully closed system
- $\bullet$  Standard 33 mm threaded caps have 0,2  $\mu$ m pore non-wettable membranes sealed directly to the caps to allow gas exchange while minimising the risk of contamination
- Optional 33 mm threaded caps are available with integrally sealed USP Class VI certified C-Flex® tubing to allow direct sterile transfer of media and cells via pumping or gravity feed
- Polystyrene construction provides excellent optical clarity and mechanical strength

#### TC treated surface

Uncharged polystyrene has an uncharged, hydrophobic surface to which cell attachment proteins bind poorly. This results in poor and uneven cell attachment and growth. Tissue culture (TC) treated polystyrene has a negatively charged, hydrophilic surface to which cell attachment proteins bind evenly. This provides a good surface for cell attachment and growth.

#### Corning® CellBIND® surface

The Corning® CellBIND® surface enhances cell attachment under difficult conditions, such as reduced-serum or serum-free medium, resulting in higher cell yields.

- More consistent cell attachment resulting in increased cell growth
- Adapts cells more quickly to reduced-serum or serum-free conditions
- Reduces premature cell detachment from confluent cultures
- May eliminate the need for tedious, time-consuming, low stability biological coatings
- Requires no refrigeration or special handling and is stable at room temperature

#### **Ultra-Low Attachment surface**

The Ultra-Low Attachment surface is a covalently bonded hydrogel surface that is hydrophilic and neutrally charged. It minimises cell attachment, protein absorption and enzyme activation. The surface is non-cytotoxic, biologically inert and non-degradable.

- Maintains cells in a suspended, unattached state
- Prevents stem cells from attachment-mediated differentiation
- Prevents anchorage-dependent cells from dividing
- Reduces binding of attachment and serum proteins to the substrate

#### Accessories

A variety of optional filling caps are available to allow direct aseptic transfer of media and cells via pumping or gravity feed. Several coupling devices are available on these filling caps with or without integrally sealed USP Class VI certified C-Flex® tubing. Optional filling caps with attached filters with hydrophobic membranes provide for gas exchange and faster aseptic venting during liquid transfers. Extra sterile vented or unvented 33 mm replacement caps are also available. Reusable stacking devices fit between CellSTACK® chambers to keep them level and optimise incubator space while providing clearance for gas exchange.

Туре	Recommended working volume (ml)	Growth area (cm²)	Pk	Cat. No.
TC treated surface	<u> </u>	` , ,		
1 chamber	125 - 190	636	8	734-1038
2 chambers	250 - 380	1272	5	734-1039
5 chambers	625 - 950	3180	2	734-1197
5 chambers	625 - 950	3180	8	734-4061
10 chambers	1250 - 1900	6360	2	734-1040
10 chambers	1250 - 1900	6360	6	734-1041
40 chambers	5000 - 7600	25440	2	734-4052
Corning® CellBIND® surface				
1 chamber	125 - 190	636	8	734-1017
2 chambers	250 - 380	1272	5	734-1014
5 chambers	625 - 950	3180	2	734-4060
10 chambers	1250 - 1900	6360	2	734-1207
10 chambers	1250 - 1900	6360	6	734-1015
40 chambers	5000 - 7600	25440	2	734-1016
Ultra-Low Attachment surface				
1 chamber	125 - 190	636	8	734-4059
Description			Pk	Cat No
Description			PK	Cat. No.

Description	Pk	Cat. No.
Accessories		
Solid cap, sterile	6	734-4167
Vent cap, 0.2 μm membrane, sterile	6	734-4166
Vent cap, 9.5 mm ID tubing, 7 cm length, Pall® Acro 50, PVDF filter, sterile	5	734-1108
Fill cap, 3.2 mm ID tubing, female luer lock with male luer plug, sterile	5	734-1109
Fill cap, 9.5 mm ID tubing and 7.94 mm barbed fitting, sterile	5	734-1110
Vent cap, 9.5 mm ID tubing, 7 cm length, Pall® Bacterial Air Vent, sterile	4	734-1205
Two vented overcaps and one solid overcap for the universal cap, sterile	100	734-1208
Fill cap, female MPC coupling, 6.4 mm ID barbed fitting with male end cap, sterile	4	734-4062
Fill cap, female MPC coupling, 9.5 mm ID barbed fitting with male end cap, sterile	4	734-4063
Stacking device, ABS, non sterile	5	734-4064

Description	Pk	Cat. No.
Accessories		
Fill cap, 6.4 mm ID tubing, 70 cm length, male MPC coupling with female end cap, sterile	4	734-1209
Fill cap, male MPC coupling, 6.4 mm ID barbed fitting with female end cap, sterile	4	734-4066
Fill cap, male MPC coupling, 9.5 mm ID barbed fitting with female end cap, sterile	4	734-4068

All caps are 33 mm threaded caps

### Cell culture vessels, Corning® HYPERStack® Corning®



The Corning® HYPERStack® cell culture vessel is a closed system that allows fluid manipulations to occur through preassembled tubing sets. Two 3/8″ ID tubing ports for filling and venting allow filling via bag assembly, sterile bottle connection or pumping. The attached vent filters are 0,2  $\mu$ m pore, hydrophobic membranes that allow air displacement during filling while minimising the risk of contamination.

- Closed system approach no open fluid manipulations Class VI certified C-FLEX® tubing for liquid handling manipulations
- Low particulate assembly method acceptable for cell therapy applications
- Corning proprietary gas-permeable film technology
- Corning® CellBIND® surface treatment for optimal cell attachment and performance
- Virgin polystyrene provides excellent optical clarity and mechanical strength
- Gamma sterilised to SAL 10-6 standard
- 100% leak tested prior to shipping

Сар	Description	Growth area (cm²)	Packed	Pk	Cat. No.
HDPE, flat top	10 layer, rectangular, sterile, barcoded	1720	4 per pack/24 per case	24	734-4010
PC, clear	12 layer, rectangular, sterile	6000	1 per pack/4 per case	4	734-2483
PC, clear	36 layer, rectangular, sterile	18000	1 per pack/2 per case	2	734-2484
PC, clear	120 layer, rectangular, sterile	60000	1 per case	1	392-0360



### Cell culture chambers, Nunc™ EasyFill™ cell factories Thermo Scientific



### PS, sterile

The EasyFill™ Cell Factory has one large and one small opening in each unit, which makes it versatile and easy to use. EasyFill™ Cell Factory bridges the gap between small scale research and large scale GMP production. It can be used as it is, without any accessories, or used with plug and play connections for rapid attachment of tubing and filters, significantly reducing contamination risk. EasyFill™ systems are available with 1, 2, 4 or 10 growth chamber levels, providing surface areas ranging from 630 cm² to 6300 cm².

- Versatile large opening facilitates the desire to pour media directly and small opening supports those that need a closed, aseptic system for filling and harvesting
- Bridges small scale process development with large scale production
- Easy to use and ready to use straight from the box, no accessories needed
- High yield and process efficiency
- Nunclon™∆ surface treatment to promote consistent performance for cell attachment and proliferation in serum free and serum containing media

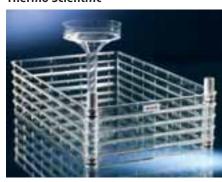
W×L: 250×335 mm

**Delivery information:** Shipped sterile and ready to use, for single use applications.

Туре	Recommended working volume (ml)	Growth area (cm²)	Pk	Cat. No.
1 level	200	632	6	734-2242
2 levels	400	1260	6	734-1443
4 levels	800	2520	4	734-1445
10 levels	2000	6300	2	734-1444
Description			Pk	Cat. No.
Accessories for Nunc™ EasyFill™ cell factorie	S			
PC connector			10	390-0343
Cap filter			10	392-0294
Gelman filter (1 $\mu$ m) with connector, sterile			2	390-0344
Air filter (0,2 μm) with connector, sterile			2	390-0345
7 III III (0/2 piii) Will connector, steine				550 00



### Cell culture chambers, Nunc™ cell factories Thermo Scientific



#### PS. sterile

For the industrial scale production of, for example, vaccines, monoclonal antibodies or pharmaceuticals.

- Ideal for adherent cells, but can also be used for suspension cultures
- Growth kinetics are unaltered from laboratory scale culture
- Available in 1, 2, 10 and 40 tray versions for easy scale-up
- Low contamination risk
- Certified Nunclon™∆ surface treatment ensures excellent conditions for cell attachment and growth

Tray L×W: 335×205 mm

Туре	Recommended working volume (ml)	Growth area (cm²)	Pk	Cat. No.
1 level	200	632	8	732-2603
2 levels	400	1264	6	732-2606
4 levels	800	2528	10	734-2187
10 levels	2000	6320	2	734-2082
10 levels	2000	6320	6	734-2105
40 levels	8000	25280	2	734-2028

Description	Pk	Cat. No.
Accessories		
Start-up kit*, sterile	1 KIT	734-2106
Connector PTFE	10	734-2110
Gelman filter (1 μm), sterile	10	391-8339

<sup>\*</sup>Start-up kit includes: PC connector, air vent filter, white filter adapter cap, cover caps, tube clamp and silicone tubing.



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### Cell strainers, Falcon® Corning®



An easy, ready-to-use way to consistently obtain a more uniform single-cell suspension. Made of a strong nylon mesh and available with 40, 70 or 100  $\mu$ m pores that are evenly spaced for optimal performance in a variety of applications. A faster and easier alternative to gauze filtration in procedures involving dissociation of cells from either clumps or primary tissue.

- Moulded, colour-coded PP frame with tab enables easy handling
- Fits perfectly into a 50 ml Falcon® conical tube or other similarly sized tube
- Sterilised by gamma irradiation and conveniently available in individual, peel-open packaging
- Extended lip on strainer enables aseptic handling with forceps

Description	Pk	Cat. No.
Cell strainers, 40 µm pore size, blue frame	50	734-0002
Cell strainers, 70 µm pore size, white frame	50	734-0003
Cell strainers, 100 um pore size, vellow frame	50	734-0004



### Cell strainers for 1000 µl pipette tips, Flowmi™ Bel-Art Products







Flowmi™ cell strainers (pore size 40 µm) provide fast, efficient filtering of small volume samples (up to 1000 µl) and are unmatched at preserving sample volume.

- Decreases the potential for clogging of FLOW or FACS\* instruments by effectively filtering cellular debris
- Flowmi™ fits most 1000 µl tips, including VWR brand, Axygen, Nichiryo and Eppendorf, and more
- Compact tray holds 50 Flowmi™ cell strainers ready for press and fit attachment to your tip
- Tray features a sliding cover for easy, one-handed use
- Packaged in a re-sealable bag to maintain sterility when used in a laminar flow hood

Note: Recommended for use with samples having a maximum concentration of 2×10<sup>6</sup> cells/ml.

Description	Pk	Cat. No.
Flowmi™ cell strainers for 1000 μl pipette tips, 40 μm pore size	50	734-5950

 $<sup>\</sup>ensuremath{^{\star}}$  FACS is a registered trademark of Becton-Dickinson Corporation





### **Cell scrapers and cell lifters**



Specifically designed to make collecting of cells easier and more effective. Available with a choice of blade positions - scraper for use in flasks, or lifter for use in harvesting cells (especially stem cells) in dishes.

- Cross-ribbed handle in ABS provides a greater rigidity and ensures a better control while scraping cells
- Thin, flexible TPE blade prevents damage to cells
- Individually wrapped
- Sterilised by gamma irradiation
- Non pyrogenic

Description	Total length (mm)	Pk	Cat. No.
Cell scraper, blade width 20 mm	250	100	734-2602
Cell scraper, blade width 30 mm	390	100	734-2604
Cell lifter, blade width 20 mm	250	100	734-2603
Cell lifter, blade width 30 mm	390	100	734-2605

### Cell scrapers, Falcon® Corning®



### PS handle, TPE blade

Designed to provide maximum accessibility to the growth surfaces of a variety of culture vessels.

- Cross-ribbed PS handle provides greater rigidity, to ensure better control while scraping cells
- Highly compliant TPE blade pivots to provide multiple angles to remove cells from the entire growth surface.

Description	Total length (mm)	Pk	Cat. No.
Cell scraper for use with 12.5 - 25 cm <sup>2</sup> vessels, 18 mm blade	180	100	734-0385
Cell scraper for use with 75 cm <sup>2</sup> vessels, 18 mm blade	250	100	734-0386
Cell scraper for use with 75 cm <sup>2</sup> vessels, 30 mm blade	250	100	734-1111
Cell scraper for use with 150 - 175 cm <sup>2</sup> vessels, 30 mm blade	400	100	734-0387



## Cell scrapers and cell lifters Corning®



Useful for the manual harvesting of cells, scrapers are designed for use in flasks and cell lifters for use in harvesting cells (especially stem cells) in dishes.

- Blade design minimises cell damage and ensures even contact with the growth surface
- Individually wrapped
- Sterilised by gamma radiation
- Certified non-pyrogenic

Description	Total length (mm)	Pk	Cat. No.
Cell lifter, 19 mm blade, 180 mm handle	180	100	734-1526
Small cell scraper, 18 mm blade, 250 mm handle	250	100	734-1527
Large cell scraper, 30 mm blade, 390 mm handle	390	100	734-1528



### Cell scrapers, Nunc™ Thermo Scientific



Cell scrapers for cell harvesting are available in two lengths, with adjustable blade for optimal application flexibility. Non-pyrogenic.

Description	Total length (mm)	Pk	Cat. No.
For use with 25 - 80 cm <sup>2</sup> flasks, blade offset 7.5 mm, blade width 15.5 mm	230	250	734-2132
For use with 75 - 175 cm <sup>2</sup> flasks, blade offset 16 mm, blade width 17.5 mm	320	250	734-2133





### Plate roller for securing films and foils to microplates



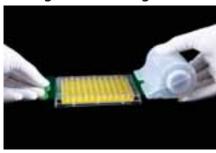
Soft rubber roller recommended for assuring tight and consistent application of adhesive films to microplates.

Description	Pk	Cat. No.
Plate roller	1	391-1278





### Sealing film for biological cultures



#### Rayon film with medical grade adhesive

Hydrophobic, porous film in sheeted-roll format for sealing tissue culture plates, bio-blocks, and 96-well plates where gas exchange is necessary for cell or bacterial growth.

- Recommended temperature range from -20 to +80 °C
- Total thickness 140 μm
- Prescored films separated by red colour bands for easy application
- Pierceable and breathable

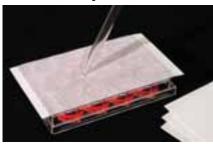
Each roll contains sufficient film to cover 50 plates.

Description	Pk	Cat. No.
Starter kit including dispenser and 2 film rolls	1 KIT	731-0313
Starter kit including dispenser and 2 film rolls, sterile	1 KIT	731-0314
Replacement rolls	2 Roll	731-0315
Replacement rolls sterile	2 Roll	731-0316





### Breathable rayon film seals for biological cultures



A 114  $\mu$ m thick hydrophobic porous film with medical-grade adhesive for tissue culture plates, bio-blocks, and 96-well plates where gas exchange is necessary for cell or bacterial growth. These rayon films minimise cross-contamination, spillage and evaporation. They allow uniform air and  $CO_2$  exchange for all wells, unlike plate lids which favour exchange for wells near plate edges. Sterile product is packaged in tamper evident bags of 25.

- Non cytotoxic, highly gas permeable
- Pierceable using pipette tip for sample recovery
- Recommended for temperatures from -20 to +80 °C

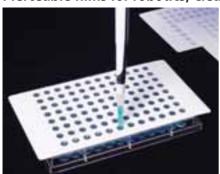
Each film L×D: 142,9×82,6 mm for standard size tissue culture plates.

Description	Pk	Cat. No.
Rayon films, non sterile	100	391-1261
Rayon films, sterile	50	391-1262





### Pierceable films for robotics, Clear-Zone



With a polyethylene top layer and inert white polypropylene and acrylic adhesive sublayer, this easy-piercing sealing film allows direct sample recovery with single or multichannel pipettors and robotic probes. The adhesive-free zone above each well prevents adhesive fouling of the pipette tip or robotic probe, minimising the amount of adhesive that comes into contact with the sample. Suitable for 96-well plates only.

- Clear zone above each well is free of adhesive
- Minimise sample exposure to adhesive

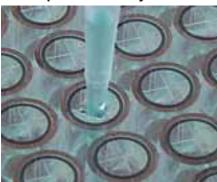
Description	Pk	Cat. No.
Clear-Zone films, non sterile	50	391-1264







### Precut pierceable vinyl films for robotics



These 100  $\mu$ m thick vinyl films with 20  $\mu$ m adhesive layer are designed for temporary protection of samples in 96-well plates from contamination and evaporation. A precut pattern over each well separates the film into four flaps that bend inward easily when pushed by a robotic probe or pipette tip, allowing access to the sample without coring or adhesive fouling. The resilient flaps regain their original position after sampling for continued sample protection. For long-term sample protection after sampling, a continuous film should be applied as a second layer. Suitable for sealing all standard 96-well plates.

- Protect samples and limit evaporation short-term
- Precut flaps bend inward without fouling probes or tips
- Flaps close for continued protection after sampling

Each film L×D: 145,5×79,4 mm

Description	Pk	Cat. No.
Precut vinyl films, non sterile	100	391-1286
Precut vinyl films, sterile	50	391-1287





### Sealing film for automation



Adhesive sealing film or foil rolls constructed on plastic cores, for use with high throughput automated microplate sealers.

- Continous rolls no splices
- Film or foil does not extend beyond edge of plastic core
- Robust static-free packaging provides protection during shipment and facilitates accurate alignment and adhesion

### Sealing film for qPCR, sitting-drop protein crystallisation, HTS and cold storage

Clear polyolefin with ultra-strong, pressure-sensitive silicone adhesive for qPCR, sitting-drop protein crystallisation, HTS, storage and general incubation applications.

- DMSO resistant
- Nuclease-, nucleic acid- and pyrogen-free
- Provides as strong a bond to the plate as heat sealing films without the drawbacks of heat

### Sealing foil for PCR, HTS and cold storage

Pierceable aluminium foil with pressure-sensitive acrylic adhesive for PCR, HTS and cold storage.

- DMSO resistant
- Easily pierceable for sample recovery
- Nuclease-, nucleic acid- and pyrogen-free

#### Sealing film for cell and tissue culture

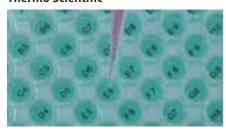
Breathable rayon films for cell and tissue culture.

- Non cytotoxic
- Highly gas permeable
- Easily pierceable for sample recovery

Description	Pk	Cat. No.
Sealing film, polyolefin	1 Roll	731-0308
Sealing foil, aluminium	1 Roll	731-0307
Sealing film, rayon	1 Roll	731-0306



### Sealing tape for MicroWell™ plates, Nunc™ Thermo Scientific



### Polyester film with acrylic adhesive

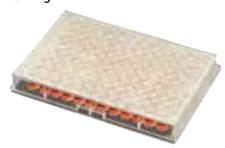
Provides an effective seal for all MicroWell™ plates used in PCR and cell culture.

- Resistant to temperatures between -70 and +100 °C
- Minimum evaporation and well-to-well cross-contamination

Dimensions: 134×80 mm

Description	Pk	Cat. No.
Sealing tape, polyester	200	732-2610

## Breatheable sealing film seals, Axygen® Corning®



Porous film seals PP and PS culture plates, 96- and 384-well plates, and other assay plates.

- Allows effective gas exchange for cellular and bacterial cultivation and prevents contamination
- Sterile packs available

Description	Sterile	Pk	Cat. No.
Breathable film non sterile	-	100	732-1027
Breathable film sterile	+	50	732-1028

# Sealing film, Axygen® AxySeal Corning®



Polyester based with uniformly and consistently applied acrylic adhesive to eliminate the edge effect in ELISA assays. Suitable for sealing tissue culture plates, for short-term storage and incubation, for transport and the containment of biohazardous solutions.

- No edge effect in ELISA assays
- Functional temperature range of -40 to +104 °C

Description	Pk	Cat. No.
Sealing film, AxySeal, 80 μm	100	732-7506



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AMRESCO products may not be available in every country, please contact your local VWR sales office



### Foetal bovine serum (FBS), premium grade Biowest



#### Sterile filtered, South American origin

Biowest foetal bovine serum (FBS) is derived from clotted whole blood aseptically collected from foetus via cardiac puncture. Each manufactured batch is rigorously controlled, from the collection of serum through to final packaging.

- Pre-selected and derived from own collection sources
- · No time consuming batch testing required
- Defined endotoxin level: <5 EU/ml
- Defined haemoglobin level: <25 mg/100 ml</li>
- Guaranteed growth promotion >80%\*
- Low batch-to-batch variation

\*tested on SP2/O-Ag14, HELA, L929 and MRC-5 cells

This premium grade product is intended for 'off-the-shelf' use. No batch-specific reservations will be held.

Description	Pk	Cat. No.
Foetal bovine serum, premium grade, South American origin	100 ml	S181B-100
Foetal bovine serum, premium grade, South American origin	500 ml	S181B-500
Foetal bovine serum, premium grade, heat inactivated, South American origin	100 ml	S181BH-100
Foetal bovine serum, premium grade, heat inactivated, South American origin	500 ml	S181BH-500

Biowest is a certified ISO 9001:2008 company. Registered by the French Ministry of Agriculture (EC regulation No. 1069/2009) under agreement no. FR 49.231.001 for the production of animal sora



### Foetal bovine serum (FBS), Instant FBS Biowest



Instant FBS is a powdered, soluble foetal bovine serum offering quality, ease of use, convenient storage and ambient shipping.

- Easy to use simply dissolve in cell culture water or directly into cell culture media (3 g of Instant FBS is equivalent to 50 ml of liquid FBS)
- Same quality as liquid FBS without the need to aliquot and refreeze, minimising the risk of contamination
- Can be stored in the fridge (+2 to 8 °C)
- Less weight and volume transported; less environmental contamination

Description	Pk	Cat. No.
Instant FBS, sterile, French origin	3 g	S382G-N005L
Instant FBS, sterile, South American origin	3 g	S381G-N005L



### Foetal bovine serum (FBS), USDA approved Biowest



#### Sterile filtered

Foetal bovine serum (FBS) derived from clotted whole blood aseptically collected from foetus via cardiac puncture. Each manufactured batch is rigorously controlled, from the collection of serum through to final packaging. USDA approved sources from countries where excellent veterinary conditions are available. EDQM certified FBS guarantees that the origin and the manufacturing process is certified by the European Directorate for the Quality of Medicine and Healthcare. Countries of origin for EDQM certified serum are Panama, Costa Rica, Paraguay, Brazil, Chile and Mexico.

- · High quality serum, rigorously tested
- Wide range of sources available
- · Full traceability and security

Description	Pk	Cat. No.
Foetal bovine serum, Chilean origin, USDA approved	100 ml	S1560-100
Foetal bovine serum, Chilean origin, USDA approved	500 ml	S1560-500
Foetal bovine serum, Central American origin, USDA approved	100 ml	S1600-100
Foetal bovine serum, Central American origin, USDA approved	500 ml	S1600-500
Foetal bovine serum, Mexican origin, USDA approved	100 ml	S1650-100
Foetal bovine serum, Mexican origin, USDA approved	500 ml	S1650-500

Continued on next page

Description	Pk	Cat. No.
Foetal bovine serum, Australian origin, USDA approved	100 ml	S1700-100
Foetal bovine serum, Australian origin, USDA approved	500 ml	S1700-500
Foetal bovine serum, heat inactivated, Chilean origin, USDA approved	100 ml	S156H-100
Foetal bovine serum, heat inactivated, Chilean origin, USDA approved	500 ml	S156H-500
Foetal bovine serum, heat inactivated, Central American origin, USDA approved	100 ml	S160H-100
Foetal bovine serum, heat inactivated, Central American origin, USDA approved	500 ml	S160H-500
Foetal bovine serum, heat inactivated, Mexican origin, USDA approved	100 ml	S165H-100
Foetal bovine serum, heat inactivated, Mexican origin, USDA approved	500 ml	S165H-500
Foetal bovine serum, embryonic stem cell tested, Mexican origin, USDA approved	100 ml	S165S-100
Foetal bovine serum, embryonic stem cell tested, Mexican origin, USDA approved	500 ml	S165S-500

Biowest is a certified ISO 9001:2008 company. Registered by the French Ministry of Agriculture (EC regulation No. 1069/2009) under agreement no. FR 49.231.001 for the production of animal sera.



### Foetal bovine serum (FBS), South American origin Biowest



#### Sterile filtered

Foetal bovine serum (FBS) derived from clotted whole blood aseptically collected from foetus via cardiac puncture. Each manufactured batch is rigorously controlled, from the collection of serum through to final packaging.

- South American origin
- High quality serum, rigorously tested
- · Full traceability and security

Description	Pk	Cat. No.
Foetal bovine serum, South American origin	100 ml	S1810-100
Foetal bovine serum, South American origin	500 ml	S1810-500
Foetal bovine serum, heat inactivated, South American origin	100 ml	S181H-100
Foetal bovine serum, heat inactivated, South American origin	500 ml	S181H-500
Foetal bovine serum, charcoal stripped, South American origin	100 ml	S181F-100
Foetal bovine serum, charcoal stripped, South American origin	500 ml	S181F-500
Foetal bovine serum, dialysed, South American origin	100 ml	S181D-100
Foetal bovine serum, dialysed, South American origin	500 ml	S181D-500
Foetal bovine serum, embryonic stem cell tested, South American origin	100 ml	S181S-100
Foetal bovine serum, embryonic stem cell tested, South American origin	500 ml	S181S-500
Foetal bovine serum, ultra-low endotoxin, South American origin	100 ml	S1860-100
Foetal bovine serum, ultra-low endotoxin, South American origin	500 ml	S1860-500
Foetal bovine serum, lipid depleted, South American origin	100 ml	S181L-100
Foetal bovine serum, lipid depleted, South American origin	500 ml	S181L-500
Foetal bovine serum, tetracycline-free, South American origin	100 ml	S181T-100
Foetal bovine serum, tetracycline-free, South American origin	500 ml	S181T-500
Foetal bovine serum, iron supplemented, South American origin	100 ml	S181R-100
Foetal bovine serum, iron supplemented, South American origin	500 ml	S181R-500

Biowest is a certified ISO 9001:2008 company. Registered by the French Ministry of Agriculture (EC regulation No. 1069/2009) under agreement no. FR 49.231.001 for the production of animal sera.



### Foetal bovine serum (FBS), Brazilian origin Biochrom



High quality foetal bovine serum (FBS) of Brazilian origin, sterile filtered and bottled under GMP guidelines.

- Examined to exclude viruses such as Bovine Virus Diarrhoea (BVD), Bovine Herpes Virus type 1 (BHV-1) and Parainfluenza Virus type 3 (PI3); test results prove negative with respect to cytopathogenicity, haemadsorption, and immunoperoxidase staining; screened also for antibodies against these virus types
- Samples available for batch testing, please enquire via your local VWR sales office

Description	Pk	Cat. No.
FBS, Brazilian origin	500 ml	392-0325





### Animal sera Biowest



A wide range of high quality animal sera are listed. Other species or special treatments may also be available, please contact your local VWR sales office for further details.

Description	Pk	Cat. No.
Adult bovine serum		
Bovine serum, French origin	100 ml	S0250-100
Bovine serum, French origin	500 ml	S0250-500
Calf serum		
Calf serum	100 ml	S0400-100
Calf serum	500 ml	50400-500
Newborn calf serum		
Newborn calf serum	100 ml	S0750-100
Newborn calf serum	500 ml	50750-500
Chicken serum		
Chicken serum	100 ml	S0500-100
Chicken serum	1.000 ml	S0500-1000
Donkey serum		
Donkey serum	100 ml	S2170-100
Donkey serum	500 ml	S2170-500
Donor foal serum		
Donor foal serum	100 ml	S0800-100
Donor foal serum	500 ml	50800-500
Goat serum		
Goat serum	100 ml	S2000-100
Goat serum	500 ml	S2000-500
Guinea pig serum	300	32000 300
Guinea pig serum	100 ml	S2450-100
Guinea pig serum	500 ml	S2450-500
Donor horse serum	300	32 .30
Donor horse serum	100 ml	S0900-100
Donor horse serum	500 ml	50900-500
Foetal horse serum	300	
Foetal horse serum	100 ml	S0960-100
Foetal horse serum	500 ml	50960-500
Lamb serum	300	
Lamb serum	100 ml	S2300-100
Lamb serum	500 ml	S2300-500
Mouse serum	300	52500 500
Mouse serum	10 ml	S2160-010
Mouse serum	20 ml	S2160-020
Mouse serum	50 ml	S2160-050
Mouse serum	100 ml	S2160-100
Mouse serum	500 ml	S2160-500
Porcine serum	500 1111	32.33 300
Porcine serum	100 ml	S2400-100
Porcine serum	500 ml	S2400-500
Rabbit serum	300	32 100 300
Rabbit serum	100 ml	S2500-100
Rabbit serum	500 ml	S2500-500
Rat serum	500 1111	32333 300
Rat serum	10 ml	S2150-010
Rat serum	20 ml	S2150-010
Rat serum	50 ml	S2150-050
Rat serum	500 ml	S2150-500
Sheep serum	300 IIII	32.30 300
Sheep serum	100 ml	S2350-100
Sheep serum	500 ml	S2350-500
	300 1111	2222 300



### Serum replacement, FreeAdd 5X Biowest



#### Sterile filtered liquid, storage 2 - 8 °C

FreeAdd 5X is a fully chemically defined substitute for animal serum. It provides the necessary nutritional support for cell growth, development and expression. It has been tested on a variety of cells and can be used in combination with basal medium to generate equal or even better cell culture performance.

- No hydrolysates or mixtures
- Non detectable endotoxin level
- Broad range (cell lines, primary cells, stem cells)
- GMP produced
- 100% batch-to-batch consistency

Description	Pk	Cat. No.
FreeAdd 5X	100 ml	S6000-100

## Serum replacement, Nu-Serum™ IV Corning®

Corning® Nu-Serum™ IV growth media supplement provides a low-protein alternative to newborn calf, foetal bovine, and other sera routinely used for cell culture. The low-protein content facilitates protein purification, virus production, monoclonal antibody production and screening, and increases the frequency of successful transfection of cells.

Formulation: Frozen solution containing 25% foetal bovine serum, EGF, ECGS, insulin, human transferrin, triiodothyronine, progesterone, estradiol-17ß, testosterone, hydrocortisone, selenous acid, o-phosphorylethanolamine, glucose, amino acids, vitamins, and other trace elements and nutrients contained in the Ham's F12 medium base.

Description	Pk	Cat. No.
Corning® Nu-Serum™ IV	100 ml	392-0321



### Liquid cell culture media, classical, BioWhittaker™



Chemically defined liquid media is used to provide nutrients for cell culture growth in research, diagnostic and manufacturing applications. All Classical Media products are manufactured in accordance with cGMP regulations.

BME is a minimal media suitable for a variety of cell types. It is an historical precursor to Minimum Essential Media (MEM).

DMEM is used in a wide range of mammalian cell culture applications. The high glucose version is well suited to high density suspension culture. The low glucose formula is used for adherent dependent cells.

DMEM:F12 combines the richness of F12 with the higher component concentrations of DMEM. This media is well suited for clonal density cultures.

Glasgow: Designed to support BHK-21 cells.

Ham's: Developed for low density (clonal) growth of CHO cells.

IMDM is suitable for fast growing cells. All formulae contain HEPES for added buffering.

L-15: Developed for fast growing tumour cells, this formula does not require a CO<sub>2</sub> enriched atmostphere. The bicarbonate free medium is buffered with elevated levels of amino acids.

McCoy's: Designed for human lymphocyte culture.

Medium 199 was originally formulated for chick embryo fibroblast culture. These four formulations require a CO2 enriched atmosphere.

NCTC-109: A complex formula used to supplement hybridoma medium.

Richter's: Also known as I-MEM, improved MEM with zinc.

RPMI is a general purpose media with a broad range of applications for mammalian cells, especially haematopoetic cells.

	•	
Description	Pk	Cat. No.
Cryoprotective medium without L-glutamine, with 15% DMSO (use 1:1 with growth medium)	100 ml	733-1686
DMEM with 4,5 g/L glucose, with UltraGlutamine I	500 ml	733-1695
DMEM with 4,5 g/L glucose, with L-glutamine	500 ml	733-1694
DMEM with 4,5 g/L glucose, with L-glutamine	11	733-1696
DMEM with 4,5 g/L glucose, without L-glutamine	500 ml	733-1698
DMEM with 1,0 g/L glucose, without L-glutamine	500 ml	733-1710
DMEM with 1,0 g/L glucose and 25 mM HEPES buffer, without L-glutamine	500 ml	733-1711
DMEM with 4,5 g/L glucose and 25 mM HEPES buffer, without L-glutamine	500 ml	733-1712
DMEM with 4,5 g/L glucose, without L-glutamine or sodium pyruvate	500 ml	733-1719
DMEM with 4,5 g/L glucose, without L-glutamine or sodium pyruvate	11	733-1720
DMEM with 4,5 g/L glucose and L-glutamine, without sodium pyruvate	500 ml	733-1726
DMEM with 4.5 g/L glucose, without L-glutamine (hybridoma fusion screened)	500 ml	733-1729

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Description	Pk	Cat. No.
DMEM with 4,5 g/L glucose, without L-glutamine or phenol red	500 ml	733-1731
DMEM:F12 with 3,151 g/L glucose and UltraGlutamine I, without HEPES buffer	500 ml	733-1668
DMEM:F12 with 3,151 g/L glucose and L-glutamine, without HEPES buffer	11	733-1669
DMEM:F12 with 3,151 g/L glucose, L-glutamine and 15 mM HEPES buffer	500 ml	733-1713
Glasgow MEM (G-MEM, BHK-21)	500 ml	733-1725
Grace's Insect Medium without lactalbumin hydrolysate, yeastolate, gentamycin or FBS	500 ml	733-1664
Grace's Complete Insect Medium with 10% heat inactivated FBS, yeastolate, lactablumin hydroysate and gentamycin	11	733-1665
Grace's Insect Medium with lactalbumin hydrolysate, yeastolate and gentamycin, without FBS	500 ml	733-1667
Ham's		
Ham's F-12 Medium with L-glutamine	500 ml	733-1699
Ham's F-10 Medium with L-glutamine	500 ml	733-1700
IMDM with 25 mM HEPES buffer and L-glutamine	500 ml	733-1715
IMDM with 25 mM HEPES buffer, without L-glutamine	500 ml	733-1717
IMDM with 25 mM HEPES buffer, without L-glutamine	11	733-1718
IMDM with 25 mM HEPES buffer and L-glutamine (hybridoma fusion screened)	500 ml	733-1730
L-15 Modified Medium 2X except L-tyrosine (1X), without L-glutamine or phenol red (virus plaquing medium)	100 ml	733-1703
L-15 Medium without L-glutamine	500 ml	733-1706
McCoy's 5A Medium (modified) with L-glutamine and 25 mM HEPES buffer	500 ml	733-1692
McCoy's 5A Medium (modified) with L-glutamine	500 ml	733-1705
MEM Eagle Joklik's Formulation for suspension cultures	11	733-1670
MEM Eagle with Earle's BSS with non-essential amino acids and L-glutamine, without calcium	450 ml	733-1671
MEM Eagle with Earle's BSS without L-glutamine	500 ml	733-1683
MEM Eagle with Earle's BSS without L-glutamine	11	733-1684
MEM Eagle with Hanks' BSS without L-glutamine	500 ml	733-1685
MEM Eagle with Earle's BSS with 25 mM HEPES, without L-glutamine	500 ml	733-1687
MEM Eagle with Earle's BSS with 25 mM HEPES, without L-glutamine	11	733-1688
MEM Eagle with Hanks' BSS with 25 mM HEPES buffer, without L-glutamine	500 ml	733-1689
MEM Alpha Eagle without L-glutamine, deoxyribonucleosides or ribonucleosides	500 ml	733-1693
MEM Eagle with Earle's BSS with L-glutamine	500 ml	733-1697
MEM Eagle with Earle's BSS with non-essential amino acids and sodium pyruvate, without L-glutamine	500 ml	733-1701
MEM Eagle with Earle's BSS without L-glutamine or phenol red (virus plaquing medium)	100 ml	733-1702
MEM Eagle with Earle's BSS without NaHCO₃ or L-glutamine	500 ml	733-1704
MEM Eagle with Earle's BSS cell culture maintenance medium*	100 ml	733-1722
MEM Eagle with Earle's BSS cell culture maintenance medium*	500 ml	733-1723
Medium 199 with Hanks' BSS with L-glutamine and 1,4 g/l NaHCO₃	500 ml	733-1675
Medium 199 with Earle's BSS with L-glutamine, 25 mM HEPES buffer and 2,2 g/l NaHCO <sub>3</sub>	500 ml	733-1679
Medium 199 with Earle's BSS with L-glutamine, 25 mM HEPES buffer and 2,2 g/l NaHCO <sub>3</sub>	11	733-1680
Medium 199 with Hanks' BSS with L-glutamine, 25 mM HEPES buffer and 1,4 g/l NaHCO <sub>3</sub>	500 ml	733-1681
Medium 199 with Earle's BSS with L-glutamine and 2,2 g/l NaHCO <sub>3</sub>	500 ml	733-1682
NCTC-109 with Earle's BSS	100 ml	733-1733
Richter's CM Medium with L-glutamine	500 ml	733-1666
RPMI 1640 with L-glutamine, 25 mM HEPES buffer, 100 units/ml penicillin, 50 µg/ml streptomycin	100 ml	733-1672
RPMI 1640 with L-glutamine, 25 mM HEPES buffer, 100 units/ml penicillin, 50 µg/ml streptomycin	500 ml	733-1673
RPMI 1640 with UltraGlutamine I and 25 mM HEPES buffer	500 ml	733-1678
RPMI 1640 with L-glutamine and 25 mM HEPES buffer	500 ml	733-1677
RPMI 1640 without L-glutamine	500 ml	733-1690
RPMI 1640 without L-glutamine	11	733-1691
RPMI 1640 with UltraGlutamine I	500 ml	733-1709
RPMI 1640 with L-glutamine	500 ml	733-1708
RPMI 1640 with L-glutamine, without D-glucose	500 ml	733-1727
RPMI 1640 without L-glutamine, without phenol red	500 ml	733-1732
Schneider's		
Schneider's Drosophila Medium (modified) with L-glutamine	11	733-1663
TC 100 Insect Medium with L-glutamine	500 ml	733-1661
William's		
William's Medium E without L-glutamine, without phenol red	500 ml	733-1662
William's Medium E without L-glutamine	500 ml	733-1728

<sup>\*</sup>with NEAA, L glutamine, 25 mM HEPES buffer, 10 µg/ml gentamycin, 50 units/ml penicillin, 50 µg/ml streptomycin, 2.5 µg/ml amphotericin B, and 2.0% heat inactivated FBS



### **ALL YOU NEED FOR PROTEOMICS**

- Protein expression
- Protein extraction
- Protein purification
- Protein analysis/detection

Request your copy from your local VWR sales office or vwr.com

### Freezing media, Biofreeze Biochrom



Biofreeze is suitable for mammalian cells or to enable tissue reconstruction. It supersedes conventional freezing media because Biofreeze creates comparable cell viability after thawing. The function of DMSO is replaced by a less toxic anti-freezing agent.

- Contains no DMSO, which is toxic to cells
- Does not contain any substances of animal origin
- Free from genetically modified organisms

Description	Pk	Cat. No.
Biofreeze, freezing medium	25 ml	392-0324

### **Bovine Pituitary Extract (BPE)**

### **Corning®**

Bovine Pituitary Extract (BPE) is a broadly used supplement to culture a variety of epithelial and endothelial cells. BPE contains growth factors (for example, basic FGF) and hormones.

Description	Pk	Cat. No.
Rovine Pituitary Extract	15 mg	734-1311

### **Cell Recovery Solution**

### Corning®

Corning® Cell Recovery Solution allows for the recovery of cells cultured on Corning® Matrigel® Basement Membrane Matrix for subsequent biochemical analysis. Corning® Cell Recovery Solution depolymerises Corning® Matrigel® Matrix gels without enzymatic digests and lengthy incubation periods at high temperatures. Cells are released without damage thereby avoiding biochemical changes during incubation and digestion of extracellular portions of cell-surface receptors and adhesion molecules.

Description	Pk	Cat. No.
Corning® Cell Recovery Solution	100 ml	734-0107

### Collagen I

### Corning®

Collagen I is found in most tissues and organs, but is most plentiful in dermis, tendon, and bone. Used as a thin coating in cell and tissue culture, it is often used to enhance cell attachment and proliferation. When applied as a gel it can be used to promote expression of cell-specific morphology and function. Collagen I is commonly used to culture endothelial cells, hepatocytes, muscle cells, and a variety of other cell types. The HC formulation of rat tail collagen I is used for three dimensional applications requiring a sturdy gel that provides a maximal 3D support matrix (guidelines are included with product).

Quality control: All preparations are quality controlled by SDS-PAGE and tested and found negative for bacteria, fungi, and mycoplasma. Source material for human collagen I tested for hepatitis B antigen and HIV-1 antibody.

Description	Pk	Cat. No.
Collagen I, human	10 mg	392-0319

### Collagen IV

### Corning®

Collagen IV is a ubiquitous component of basement membranes, the sheet-like matrix that underlies epithelial and endothelial cells and surrounds muscle fat and nerve cells. It can be used as a thin coating on tissue culture surfaces to promote cell attachment and proliferation and to study its effects on cell behaviour.

Description	Pk	Cat. No.
Collagen IV, mouse	1 mg	734-0099
Collagen IV, human	250 μG	734-0105
Collagen IV, mouse	10 mg	734-0100

### Collagen V

### Corning®

Collagen V is found in whole placenta, amnion, chorion, and cornea. It can be used as a thin coating on tissue culture surfaces to study collagen V effects on cell behavior. Collagen V has been shown to inhibit endothelial cell proliferation selectively.

Description	Pk	Cat. No.
Collagen V, human	250 μG	734-0106



### **Dispase**

### **Corning®**

Dispase is a bacillus-derived neutral metalloprotease that is recommended for recovering cell cultured on Corning® Matrigel® Basement Membrane Matrix. Dispase will yield a single cell suspension far more gently and effectively than trypsin, collagenase, or other proteolytic enzymes; it will not harm cells harvested for sub cultivation or bioassays. In addition, Dispase may be used for tissue dissociation. Dispase cleaves fibronectin, collagen IV, and to a lesser extent collagen I, but is does not cleave collagen V or laminin.

Description	Pk	Cat. No.
Dispase, 5000 caseinolytic units	100 ml	734-1312

### **Endothelial Cell Growth Supplement (ECGS)**

### **Corning®**

Endothelial cell growth supplement (ECGS) is a broadly used supplement to culture a variety of cells, particularly endothelial cells. ECGS contains various growth factors (for example, acidic FGF or ECGF-a).

Description	Pk	Cat. No.
Endothelial Cell Growth Supplement (ECGS)	15 ma	734-1306

### **Fibronectin**

### **Corning®**

Fibronectin is found in interstitial matrix and plasma. The principal function of fibronectin appears to be in cellular migration during wound healing and development. It can be used as a thin coating on tissue culture surfaces to promote attachment, spreading and proliferation of a variety of cell types.

Description	Pk	Cat. No.
Fibronectin, human	1 mg	734-0085
Fibronectin, human	5 mg	734-0101
Fibronectin, human, 5×5 mg	25 mg	734-0103

### Laminin

#### **Corning®**

Laminin, a major component of basement membranes, has numerous biological activities including promotion of cell adhesion, migration, growth, and differentiation, including neurite outgrowth. It can be used as a thin coating on tissue culture surfaces or as a soluble additive to culture medium. The Laminin/Entactin Complex, high concentration (HC) is a special formulation that has been developed for three-dimensional (3D) culture.

Description	Pk	Cat. No.
Laminin, mouse	1 mg	734-1098
Ultrapure laminin, mouse	1 mg	734-1099
Laminin/entactin complex, high concentration, mouse	10.5 mg	734-1273

### **Human Extracellular Matrix**

#### Corning®

Human extracellular matrix (ECM) is a chromatographically partially purified matrix extract derived from human placenta. It is comprised of collagen IV, laminin and heparan sulphate proteogycan. Human ECM promotes attachment, spreading, mitosis, and differentiation of anchorage-dependent epithelial cells, particularly of human origin.

Description	Pk	Cat. No.
Human Extracellular Matrix	1 mg	734-0097

### **Matrigel® Basement Membrane Matrix**

### Corning®

Corning® Matrigel® Basement Membrane Matrix is a solubilised basement membrane preparation extracted from the Engelbreth-Holm-Swarm (EHS) mouse sarcoma, a tumour rich in extracellular matrix proteins. Its major components are laminin, followed by collagen IV, entactin, and heparin sulphate proteoglycan. It also contains growth factors that occur naturally in the EHS tumour. At room temperature, Corning® Matrigel® Matrix polymerises to produce biologically active matrix material resembling the mammalian cellular basement matrix. Corning® Matrigel® Basement Membrane Matrix is effective for the attachment and differentiation of both normal and transformed anchorage dependent epithelial and other cell types. The growth factor reduced (GFR) product is useful where a more highly defined basement preparation is desired.

Description	Pk	Cat. No.
Corning® Matrigel® Basement Membrane Matrix	5 ml	734-0270
Corning® Matrigel® Basement Membrane Matrix (5×10 ml)	50 ml	734-0271
Corning® Matrigel® Basement Membrane Matrix, growth factor reduced (GFR)	5 ml	734-0268

### Matrigel® Matrix, high concentration (HC) Corning®

Corning® Matrigel® Matrix, high concentration (HC) is suited for *in vivo* applications where a high protein concentration augments growth of tumours. The high protein concentration also allows the Corning® Matrigel® matrix plug to maintain its integrity after subcutaneous injection into mice. This keeps the injected tumour cells and/or angiogenic compounds localised for *in situ* analysis and/or future excision. Applications include *in vivo* angiogenesis studies and augmentation of tumour growth in nude mice.

- Typical protein concentration 18 22 mg/ml
- Lot specific specification sheet supplied with each delivery
- Tested for the ability to promote neurite outgrowth of chick dorsal root ganglia cells and for the ability to gel quickly and maintain its form with culture medium for a period of 14 days at 37 °C
- Bacteria, fungi and mycoplasma free
- Endotoxin tested by LAL assay

Description	Pk	Cat. No.
Corning® Matrigel® Matrix, high concentration	10 ml	734-0273
Corning® Matrigel® Matrix, high concentration, phenol red free	10 ml	734-1402
Matrigel® Matrix, high concentration (HC)		
Matrigel® Matrix, growth factor reduced, high concentration	10 ml	734-1441

## Matrigel® Matrix, phenol red-free Corning®

Corning® Matrigel® Matrix, phenol red-free is recommended for assays which require colour detection (i.e. fluorescence). Corning® Matrigel® Basement Membrane Matrix is effective for the attachment and differentiation of both normal and transformed anchorage dependent epithelioid and other cell types. These include neurons, Sertoli cells, chick lens, and vascular endothelial cells, and hepatocytes. Corning® Matrigel® will influence gene expression in adult rat hepatocytes as well as three dimensional culture in mouse and human mammary epithelial cells. It will support *in vivo* peripheral nerve regeneration, can be used for metabolism and toxicology studies, and is the basis for several types of tumour cell invasion assays. Corning® Matrigel® provides the substrate necessary for the study of angiogenesis both *in vitro* and *in vivo*. Corning® Matrigel® also supports *in vivo* propagation of human tumours in immunosupressed mice.

Description	Pk	Cat. No.
Corning® Matrigel® Basement Membrane Matrix, phenol red-free	10 ml	734-0272
Corning® Matrigel® Growth Factor Reduced (GFR) Basement Membrane Matrix, phenol red-free	10 ml	734-1101

### Matrigel® Matrix, hESC-qualified

### **Corning®**

Qualified as mTeSR™1-compatible. No pre-screening required.

Description	Pk	Cat. No.
Matrigel® matrix. hESC-gualified	5 ml	734-1440

### **MITO+ Serum Extender**

#### Corning®

Corning® MITO+ Serum Extender is a concentrated, fully defined formulation of hormones, growth factors (EGF and FGF), and other metabolites (insulin and steroid hormones). It can be used to culture a variety of cells under serum-free or serum-reduced conditions.

Description	Pk	Cat. No.
Corning® MITO+ Serum Extender	5 ml	734-1317

### Poly-D-Lysine

### **Corning®**

Poly-D-lysine (PDL) is a synthetic molecule used as a coating to enhance cell attachment to plastic and glass surfaces. It has been used to culture a wide variety of cell types, particularly neurons, glial cells, and transfected cells.

Description	Pk	Cat. No.
Poly-D-I vsine	20 mg	734-1102

### PuraMatrix™ Peptide Hydrogel

Corning®

Corning® PuraMatrix™ Peptide Hydrogel is a synthetic matrix that is used to create defined three-dimensional (3D) microenvironments for a variety of cell culture experiments. To achieve optimal cell growth and differentiation, it is necessary to determine the appropriate mixture of this material and bioactive molecules (for example, growth factors, extracellular matrix (ECM) proteins, and/or other molecules). Corning® PuraMatrix™ Peptide Hydrogel consists of standard amino acids (1% w/v) and 99% water. Under physiological conditions, the peptide component self-assembles into a 3D hydrogel that exhibits a nanometer scale fibrous structure (average pore size 50 - 200 nm). Hydrogel promotes the differentiation of hepatocyte progenitor cells, rat pheochromocytoma cells (PC12), and hippocampal neurons, and supports the attachment of a variety of primary (for example, neuronal, fibroblast, keratinocyte) and transformed (for example, MG-63, SH-SY5Y, HEK293, NIH3T3) cell types. Potential applications include stem cell proliferation, tumour cell migration/invasion, angiogenesis assays, and in vivo analyses of tissue regeneration.

- Hydrogel is a highly defined material that promotes cell attachment and which is readily formed in a culture dish, plate, or cell culture insert
- Easily mixed with cells and/or bioactive molecules (such as growth factors) prior to gelation, and is injectable for in vivo studies in animals
- As Hydrogel is transparent, samples can be readily visualised using standard staining methodologies and microscopy
- Established protocols are available for 3D cell encapsulation cultures; surface plating of adherent cells on microporous membrane inserts and microplates; cell recovery for sub-culturing of biochemical analyses; and in vivo injection

WW Enable Science

Description	Pk	Cat. No.
Corning® PuraMatrix™ Peptide Hydrogel	5 ml	734-1398

### Vitronectin

### **Corning®**

Vitronectin is also known as S-protein, serum spreading factor epibolin. Vitronectin and fibronectin are the two major adhesive proteins in plasma and serum. When used as coating on tissue culture surfaces, vitronectin is useful to promote cell attachment, spreading, proliferation, and differentiation of normal and neoplastic cells, and to study cell migration.

Description	Pk	Cat. No.
Vitronectin	250 μG	734-0098

### Culture Supplement with ConA, rat

### **Corning®**

Corning® T-Cell Culture Supplement with ConA (IL-2 culture supplement), rat, is used to promote proliferation and activation of T-cells and support high-titre HIV production by leukocytes.

Description	Pk	Cat. No.
T-Cell Culture Supplement with ConA, rat	100 ml	734-1310

### **ITS Universal Culture Supplements**

#### **Corning®**

Corning® ITS Universal Culture Supplements contain insulin, human transferrin, and selenous acid, the three most universally essential components of defined culture media. They stimulate cell proliferation of a variety of cells under serum-reduced conditions.

Туре	ITS Premix	ITS+ Premix
Formulation	Lyophilised from a water solution; reconstitute in distilled water	Aqueous solution containing human recombinant insulin, human transferrin (12,5 mg each), selenous acid (12,5 μg), BSA (2,5 g), and linoleic acid (10,7 mg)
Quality control	Tested for ability to promote proliferation of HeLa cells in serum-free medium; filtered (0,2 µm membrane) and tested and found negative for bacteria, fungi and mycoplasma	Tested for ability to promote proliferation of HeLa cells in serum-free medium; filtered (0,2 µm membrane) and tested and found negative for bacteria, fungi and mycoplasma
Recommended dilution	1:1000 (dilute stock solution in serum-free medium)	1:100 (dilute stock solution in serum-free medium)

Description	Pk	Cat. No.
ITS premix media additive, lyophilised	20 ml	392-0320
ITS+ premix media additive, aqueous solution	20 ml	734-1315

## Corning® Cell-Tak™ Cell and Tissue Adhesive Corning®

Corning® Cell-Tak™ Cell and Tissue Adhesive is a formulation of polyphenolic proteins extracted from Mytilus edulis (marine mussel). These proteins are the key components of the glue secreted by the mussel to anchor itself to solid substrates in the marine environment. Corning® Cell-Tak™ is used to attach cells or tissue sections to many types of surfaces, including plastic, glass, metal, PTFE, and biological materials. It can simplify the manipulation of biological samples for a number of *in vitro* techniques, including *in situ* hybridisation, immunoassays, microinjection, immunohistochemistry, and establishing primary cells in culture. Corning® Cell-Tak™ is biocompatible and demonstrates no species specificity.

Description	Pk	Cat. No.
Corning® Cell-Tak™ cell and tissue adhesive	1 mg	734-1081
Corning® Cell-Tak™ cell and tissue adhesive	5 mg	734-1083
Corning® Cell-Tak™ cell and tissue adhesive	10 mg	734-0102

### **Amphotericin B**

### **AppliChem**

Amphotericin B (isolated from *Streptomyces ssp.*) is an antibiotic belonging to the macrocyclic lactones and its action is fungistatic. Amphotericin B binds to sterols (e.g. cholesterol, cholestanol) with planar structure and disturbs the membrane permeability. Ions, like  $K^+$ ,  $Na^+$  and  $H^+$ , or other low molecular weight substances (e.g. amino acids, sugars, nucleotides) may cross the membrane. The cytotoxic concentration is approx. 30  $\mu$ g/ml and the recommended working concentration is 2,5  $\mu$ g/ml.

Description	Pk	Cat. No.
Amphotericin B	50 mg	A1907.0050
Amphotericin B	250 mg	A1907.0250
Amphotericin B	500 mg	A1907.0500
Amphotericin B	1 g	A1907.0001



### Ampicillin, sodium salt

### **AppliChem**

Ampicillin is a half-synthetic penicillin (B-lactam antibiotic), known to interfere with the wall peptide crosslinking in growing bacteria. It inhibits the enzyme activity of transpeptidase, carboxypeptidase and endopeptidase. Its action is bactericidal and the pH optimum for its action ranges from pH 5,5 to 6.

Ampicillin sodium salt is readily water soluble and stock solutions are prepared at concentrations of 50 mg/ml, stored at -20 °C in aliquots. The working concentration in LB-ampicillin plates, LB or TB medium is 50  $\mu$ g/ml (dilution 1:1000).

Stability: The activity of a 10% aqueous solution of ampicillin, if it is stored at +4 °C (pH 7), is reduced by 15% after 24 hours, 33% after 48 hours and 65% after 7 days. At room temperature, the corresponding loss of activity is 28%, 45% and 81%, respectively.

Description	Pk	Cat. No.
Ampicillin, sodium salt	10 g	A0839.0010
Ampicillin, sodium salt	25 g	A0839.0025
Ampicillin, sodium salt	100 g	A0839.0100

### **G418** disulphate

### **AppliChem**

G418 blocks protein synthesis in mammalian cells by interfering with ribosomal function. It is an aminoglycoside antibiotic, similar in structure to neomycin, gentamycin, and kanamycin. G418 disulphate is used for the selection of stably transformed cells, which have incorporated the neomycin resistance gene (aminoglycoside phosphotransferase) derived from the transposons Tn 5 and Tn 601, respectively.

Stock solutions of G418 should be prepared in a highly buffered solution, so that addition of the drug does not alter the pH of the medium. Stock solutions can be prepared at a concentration of 50 mg/ml.

Description	Pk	Cat. No.
G418 disulphate	1 g	A2167.0001
G418 disulphate	100 g	A2167.9100

### Gentamycin sulphate

### **AppliChem**

Gentamycin is an aminoglycoside antibiotic and was isolated from *Micromonospora* species (actinomycetales). The sulphate salt is soluble in water, formamide, ethylene glycol, 0,1 N NaOH or 0,1 N HCl at a concentration of >20 mg/ml. It is insoluble in methanol, ethanol, acetone, benzene or chloroform. In solution Gentamycin is very stable at -20 to +37 °C. Short autoclaving is possible. It may be employed in the pH range from 2,2 and 10 without loss of activity.

Description	Pk	Cat. No.
Gentamycin sulphate	1 g	A1492.0001
Gentamycin sulphate	5 g	A1492.0005
Gentamycin sulphate	10 g	A1492.0010
Gentamycin sulphate	25 g	A1492.0025

### Penicillin G potassium salt

### **AppliChem**

Penicillin G was isolated from *Penicillium notatum*. The bactericidal effect of this β-lactam antibiotic is based on the irreversible inhibition of transpeptidase, interfering with the biosynthesis of the cell wall in bacteria.

Stability: Penicillin G potassium salt is readily water soluble. The dry substance can be stored at room temperature or +4 °C and is stable for up to 5 years. The buffered solution (pH 4,5 to 7) loses 5% of its activity after 20 days at +4 °C. Storage of the solution at room temperature results in a 5% loss of activity after 48 hours, 10% loss after 7 days, and 20 to 50% loss after 14 days. The stability in unbuffered solution is much lower (approximately 3 to 7 days at +4 °C).

Description	Pk	Cat. No.
Penicillin G potassium salt	10 g	A1837.0010
Penicillin G potassium salt	25 g	A1837.0025
Penicillin G potassium salt	100 q	A1837.0100

### Rifampicin

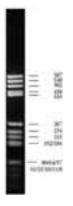
### **AppliChem**

Rifampicin inhibits bacterial DNA-dependent RNA synthesis by inhibiting bacterial DNA-dependent RNA polymerase.

Description	Pk	Cat. No.
Rifampicin	500 mg	A2220.0500
Rifampicin	1 g	A2220.0001
Rifampicin	5 g	A2220.0005



### PCR Mycoplasma Test Kit AppliChem



Ready to use PCR mix for the detection of mycoplasma in cell culture.

The PCR Mycoplasma Test Kit is designed to detect the presence of mycoplasma contamination in biological materials, such as cultured cells. Mycoplasma detection by the direct culture procedure is time-consuming and some mycoplasma species are difficult to cultivate. With PCR testing, results are obtained within a few hours, since the presence of contaminant mycoplasma can be easily detected simply by verifying the bands of amplified DNA fragments in electrophoresis. There is no need to prepare probes labelled with radioisotopes, or to calculate enzyme, dNTPs or buffer concentrations. Instead, a ready-to-use, optimised PCR mix is supplied. The primer set allows detection of various mycoplasma species (*M. fermentans, M. hyorhinis, M. arginini, M. orale, M. salivarium, M. hominis, M. pulmonis, M. arthridtidis, M. bovis, M. pneumoniae, M. pirum, M. capricolum*) as well as *Acholeplasma* and *Spiroplasma* species, with high sensitivity and specificity.

**Delivery information:** Kit contains reaction mix (including PCR primer nucleotide mix and HotStart *Taq* polymerase), reaction buffer solution and positive template control.

Description	Pk	Cat. No.
PCR Mycoplasma Test Kit		
PCR Mycoplasma Test Kit	20 Tests	A3744.0020

### PCR Mycoplasma Test Kit II AppliChem



Meets criteria of section 2.6.7 of Ph. Eur.

**Delivery information:** Supplied without *Taq* DNA polymerase. Kit contains PCR primer nucleotide mix, reaction buffer solution, water (PCR grade), positive template control, and internal control DNA. Shipped at room temperature.

Description	Pk	Cat. No.
PCR Mycoplasma Test Kit II	50 Tests	A8994.0050



## Mycoplasma Treatment Kit, Myco-3 AppliChem

For the treatment of Mycoplasma infected cells.

Myco-3 is a 100X concentrated solution based on the ciprofloxacin antibiotic, which is a member of the fluoroquinolone group. Many mycoplasma species have been found to be sensitive to Myco-3, including *A. laidlawii, M. orale, M. hyorhinis, M. fermentans*, and *M. arginini*. These species are responsible for most of the contamination in cell culture. At the concentrations recommended for use  $(1 \mu g/ml)$ , no cytotoxic effects have been found, and the treatment is easy to perform. The pH value of Myco-3 is acidic (pH 4 to 5). When added to medium the pH change is negligible.

Description	Pk	Cat. No.
Myco-3, 100X	10 ml	A5240.0010
Myco-3, 100X	20 ml	A5240.0020
Myco-3, 100X	100 ml	A5240.0100



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