# Gamlab Brand

Glasswashers • Plastics • Gloves • Labels • Filters • pH

Choice, Service and Trust



# INFORMATION

Camlab can supply a comprehensive range of laboratory products . We have listed our own branded products which offer great value for money and Camlab Choice, a range of small laboratory bench equipment that we have selected for you.

Camlab Water





Camlab Plastics



Camlab Filtration

Camlab Brand



Camlab Choice



Other famous brands we can supply:



Isales@camlab.co.uk

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# TRUESCIENCE

# TRUESCIENCE METER



### Accessible

 $\bullet$  Attach up to 6 SMART Caps to one single tablet using the TRUEscience App on Android platform

• Measure Anywhere: Totally portable and with an effective range of up to 50 meters you are now free to take measurements easily from more locations than before

• Logging: The SMART Cap can log data continuously and independently of the tablet and can store up to 10,000 readings before needing to download the data

• Open Electrode system: choose from our range of S7 electrodes for pH, ion selective, dissolved oxygen or redox, or use your own specialist electrode as long as it has an S7 connector

• Wire free and Stand Free: Using the SMART Cap is easy. There are no cumbersome wires or stands. You simply clip the SMART Cap to the side of a beaker or rest it on the storage stand

### Credible

• Traceability via the innovative QR buffer system automatically loads batch info, expiry date and re-order info into the App and even allows you to access MSDS sheets and batch calibration certificates for each buffer used

• Full Calibration Suite: Not only does the TRUEscience meter tell you when it was last calibrated, it keeps a full calibration history by user and alerts you to re-calibrate using its simple step by step process at intervals you control

• Cost Effective: TRUEscience offers a really practical solution with the performance and accuracy (2 decimal places) you would expect from a serious scientific laboratory Meter at a fraction of the cost. Using the free TRUEscience App from GooglePlay allows you to calibrate, measure, log and more on a standard Android tablet

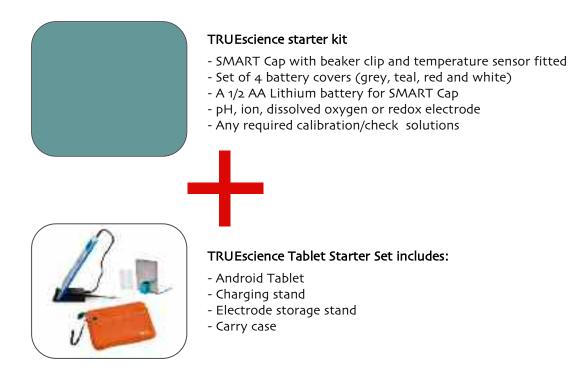
### Connected

• Logging: View your logged data as a table and as a graph within the tablet, or easily export and send data in .csv format

• Store and share enriched readings: The App can store, multiple results by user and allows you to add date, time, images, notes and GPS location tags.

• Alarms and Alerts: Using the power of the Android tablet you can configure alarms at set measurement values and be alerted immediately on the tablet as soon as the readings are outside the set limits.

• Consumables re-ordering: Re-order consumables directly on your tablet through the TRUEscience registered outlet. You need never run out of calibration buffers and storage solutions.



# TRUESCIENCE SMART CAP FOR PH

The TRUEscience SMART Ion Selective electrodes (ISE/ION) Cap utilises the same technology that can be found in the SMART pH Cap. TRUEscience have developed a range of Ion selective electrodes that are interchangeable on the TRUEscience platform which includes the SMART Cap and the TRUEscience App. The App works on both Android tablet and smart phone that are bluetooth enabled.

TRUEscience Ion Selective Electrodes (ISE) are rugged solid state sensors with built in Teflon double junction reference half cells that do not require filling solutions, membrane replacements or operator maintenance. These combination ISEs can be stored dry. The solid state sensor and maintenance free reference makes these electrodes ideal for both laboratory and field work. The solid state sensors have a huge advantage over conventional ISEs in that there is no internal fill solution to degenerate the sensors. This means that TRUEscience combination ISEs have an unrivalled lifetime and a very low cost of ownership.



# SMART CAP WITH ELECTRODE

Ideal for those who wish to use their own compatible Android device, or to add to a full kit for measuring multiple samples simultaneously.

The cap includes:

• SMART pH Cap in Grey or White , with beaker clip and temperature sensor fitted • TRUEscience combination double junction pH electrode, with soaker bottle fitted • 1/2 AA Lithium Battery

• Set of 3 colour coded battery covers

For use with any Android Tablet that has Bluetooth 4.0 or later and Android 4.4 or later.

### ORDERING INFORMATION

1201691	TRUEscience SMART pH Cap Kit with Electrode and Android Tablet - White SMARTCap
1201823	TRUEscience SMART pH Cap Kit with Electrode and Android Tablet - Grey SMARTCap
1201822	TRUEscience SMART pH Cap and pH Electrode - Grey SMARTCap
1201690	TRUEscience SMART pH Cap and pH Electrode - White SMARTCap

# COMPLETE PH KIT

This complete kit allows you to begin testing straight out of the box and includes:

• pH SMARTCap in White or Grey, with beaker clip and temperature sensor attached

•Epoxy bodied double junction pH electrode

- with S7 connector and storage bottle attached • Battery
- •Set of 3 colour coded battery covers
- •Set of 3 pH Buffers in 250ml size, pH 4, 7 and 10
- •TRUEscience Storage Stand
- •USB Port charging stand for tablet
- •Android Tablet (Bluetooth enabled)





# HEALTH & SAFETY

# TRUESCIENCE PH

# TRUESCIENCE S7 ELECTRODES



A range of pH electrodes for TRUEscience SMART pH Caps - come complete with QR code for quick registration to your TRUEscience app

TRUEscience electrodes are designed to work in harmony with the smart meter app.

Scan the QR code included in the box when you first start using the electrode to register the electrode to your cap. Using the scanned data the app will automatically remind you when it is due for replacement.

Compatible with other pH meters with S7 connection.

# S7 GLASS ELECTRODE

**1201575** - This high accuracy glass electrode is ideal for aqueous solutions in laboratory testing

- pH Range 0-14
- Temperature range o-80°C
- Reference single junction AgCl
- Dimensions 12x120mm long
- Body Glass
- Isopotential omV +/- 18mV
- Slope 96-102%
- Impedance 100mOhms

# S7 DJ EPOXY ELECTRODE

**1209920** - This double junction epoxy electrode is ideal for aqueous solutions in field and laboratory applications

- pH Range o-14
- Temperature range o-80°C
- Reference double junction AgCl
- Dimensions 12x120mm long
- Body Polyether sulphone
- General purpose electrode

# S7 FLAT DJ ELECTRODE

**1201574** - This flat epoxy probe is easy to clean and suited to food samples or semi-solid samples such as gels, pastes, soils etc

- pH Range o-14Double Junction Ag/Agcl
- Porous Teflon Junction
- 0-14 range
- Flat tip for difficult samples, food, semi solids
- Epoxy body
- 12x120mm long

# **S7 SPEAR TIP ELECTRODE**

**1206874** - This high accuracy glass electrode is ideal for semi-aqueous solutions in laboratory testing like foodstuffs, slurries and soil.

- pH Range 0-14
- Temperature range o-80°C
- Reference AgCl liquid filled junction
- Body Glass
- Response time <30 seconds
- Shaft length 120mm

# ACCESSORIES

### ORDERING INFORMATION

pH electrode storage solution 250ml
PH electrode storage solution 500ml
PH electrode storage solution 1000ml
Electrode cleaning solution 500ml
Replacement Lithium Battery
Spare storage tubes for TRUEscience storage stand x 2
TRUEscience android tablet- Bluetooth enabled
Battery Covers (red, teal, grey, white)
S7 to BNC cable 0.8m
S7 to BNC cable 2.0m

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# TRUESCIENCE ACCESSORIES

# STORAGE STAND



Storage stand for TRUEscience SMARTCap includes 2 storage tubes. This unique storage stand is designed to ensure the SMARTCap electrode is kept in top condition and is ready to use. Requires very low usage of storage solution.

Requires assembly and storage solution is item 1145514

# CHARGING TABLET STAND

This TRUEscience charging station gives you a place to charge your tablet and use it at the same time.

The small-size footprint saves bench space and has



a non slip base. The two smart ports can automatically recognises the device connected and outputs the right amount of

current that allows for the fastest charging time possible. Compatible with nearly all devices with 5V input. The charging dock protects against overcharge, over current, and short circuits and meets CE, FCC, and ROHS specifications.

Box Contents: Dual-Port USB Charging Dock, USB Cable, Power Cord, user manual. 18 month manufacturers warranty.

# PLAIN TABLET STAND

This simple tablet stand is made from stainless steel and allows up to four different viewing angles of your tablet by simply moving the back support plate. It has a neoprene support to grip and protect the tablet surfaces.



# **BUFFERS AND STORAGE**

Ideal for use with TRUEscience SMART pH Cap, these pH buffers are colour coded and QR coded for ease of identification using the TRUEscience App. Available in pH 4, 7 and 10 and calibrated at 20°C.

Temperature dependence data is printed on the label as are the lot numbers.

The expiry date is printed on the label for each bottle and these buffers can be used up to the expiry date even when opened. Certificates of Analysis are available for all products.



### ORDERING INFORMATION -

1201459	Solution pH4.00 ± 0.01 @ 20°C 250ml red
1201458	Solution pH7.00 ± 0.01 @ 20°C 250ml yellow
1201460	Solution pH10.00 ± 0.01 @ 20°C 250ml blue
1144885	Solution pH4.00 ± 0.01 @ 20°C 500ml red
1144955	Solution pH7.00 ± 0.01 @ 20°C 500ml yellow
1145008	Solution pH10.00 ± 0.01 @ 20°C 500ml blue
1144887	Solution pH4.00 ± 0.01 @ 20°C 1000ml red
1144960	Solution pH7.00 ± 0.01 @ 20°C 1000ml yellow
1144887	Solution pH1000 ± 0.01 @ 20°C 1000ml blue

# TABLET CASE



This handy carry case is the ideal size to hold both your Android tablet and TRUEscience SMARTCap to keep everything together and protected.

Neoprene case for some protection, wrist strap for secure portability and zips to both sections for security.

Included with the full TRUEscience kits.

### ORDERING INFORMATION

1145514	TRUEscience storage stand complete
1201562	TRUEscience Charging Tablet Stand including USB cable
1205281	TRUEscience Lenovo Tablet case
1201563	Multi-angle desktop tablet stand for TRUEscience Tablet - stainless finish



# TRUESCIENCE SMART CAP FOR ISE/ION

The TRUEscience SMART Ion Selective electrodes (ISE/ION) Cap utilises the same technology that can be found in the SMART pH Cap. TRUEscience have developed a range of Ion selective electrodes that are interchangeable on the TRUEscience platform which includes the SMART Cap and the TRUEscience App. The App works on both Android tablet and smart phone that are bluetooth enabled.

TRUEscience Ion Selective Electrodes (ISE) are rugged solid state sensors with built in Teflon double junction reference half cells that do not require filling solutions, membrane replacements or operator maintenance. These combination ISEs can be stored dry. The solid state sensor and maintenance free reference makes these electrodes ideal for both laboratory and field work. The solid state sensors have a huge advantage over conventional ISEs in that there is no internal fill solution to degenerate the sensors. This means that TRUEscience combination ISEs have an unrivalled lifetime and a very low cost of ownership.





Ion Selective electrodes work in the same way as standard pH electrodes. When the sensing electrode comes into contact with the ion being measured a potential is created across the sensitive membrane. This potential is proportional to the ion concentration. When measured against the built in stable reference half-cell the electrodes overall potential difference in mV is recorded by the TRUEscience cap and, upon calibration, is converted to concentration units as required.

ISEs have a variety of constructions. The sensors can be Crystalline, PVC or pellets of mixed insoluble compounds. As a result, unlike pH electrodes, they can be left dry.

# **TECHNICAL SPECIFICATION - ISE**

Measuring range (mV) Resolution (mV) Temperature accuracy Display units Display ion species on screen Calibration Calibration standards Standard recognition Temperature range Store values Battery life Battery type Tablet and App requirements Dimensions of Cap Temperature probe length Weight Operating/storage temperature Calibration certainty Colour keyed battery covers Multiple Cap measurements Consumables ordering online Interval logging

0-1000mV ±0.1mV ±0.5°C mg/l or mV Yes Up to 5 points Stock solution or saved Dilution Series Group QR code input or manual Input 5°C - 50.0°C 10,000 measurements/log 1 year normal use 1/2 AA Lithium Thionyl Chloride, 3.6V, 1200mA See below or specified list of tested models on our website L218 x W48 x D24 mm including temperature probe 130mm long 91.59 0-55°C Yes, App indicates calibration status, user, time and date Yes Yes, up to 6 simultaneously, multiple parameter possible Yes Yes



# TRUEscience ISE starter kits includes:

- SMART Cap with beaker clip and temperature sensor fitted
- Set of 4 battery covers (grey, teal, red and white)
- A 1/2 AA Lithium battery for SMART Cap
- Ion selective electrode, S7, no lead
- ISE calibration solution 1000ppm 500ml
- Ionic strength adjustment buffer (ISAB) 500ml



### TRUEscience Tablet Starter Set includes:

- Android Tablet
- Charging stand
- Electrode storage stand
- Carry case



# TRUESCIENCE SMART CAP FOR DISSOLVED OXYGEN

The TRUEscience SMART DO Cap utilises the same technology that can be found in the SMART pH Cap. TRUEscience have developed a range of electrodes that are interchangeable on the TRUEscience platform which includes the SMART Cap and the TRUEscience App which is Android based. The App works on both Android tablet and smart phone that are bluetooth enabled. The TRUEscience Galvanic Dissolved Oxygen electrode offers a fast response and rugged construction ensuring that calibration and measurement are both rapid and consistent.

Polarographic cells are notoriously awkward to set up with the need to constantly change membranes and internal solutions. As a result calibration is laborious and membrane performance can be variable. The Galvanic DO cell is very simple in its operation and basically works as a battery which generates a voltage. This voltage is directly proportiona to the oxygen concentration which permeates through the membrane into the galvanic cell.

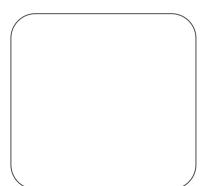
The TRUEscience galvanic oxygen cell comes complete and ready for operation. Bubble removal from the membrane/cell interface is not required which allows calibration to be performed quickly and easily by any operator regardless of experience.



# TECHNICAL SPECIFICATION - DISSOLVED OXYGEN

Measuring range (mg/l) Accuracy (mg/l) DO saturation (%O<sub>2</sub>) Accuracy (%O2) Calibration points Standard recognition Automatic temperature compensation o°C - 40.0°C Probe (where included) Temperature accuracy Store values Battery life Battery type Tablet and App requirements Dimensions of Cap Temperature probe length Weight Operating/storage temperature Calibration certainty Colour keyed battery covers Multiple Cap measurements Consumables ordering online Interval logging

0.02-30.0 mg/l +/- 1% o-100% Oxygen +/- 1% up to 2 points Pre-Loaded Air saturation 100% and 0%,  $\rm O_2$  saturation user settable. Plastic body Galvanic DO probe, maintainance free-disposable +/- 0.5°C 10,000 measurements/log 1 year normal use 1/2 AA Lithium Thionyl Chloride, 3.6V, 1200mA See below or specified list of tested models on our website L218 x W48 x D24 mm including temperature probe 130mm long 91.5 g o-55°C (cap only) Yes, App indicates calibration status, time and date Yes Yes, up to 6 simultaneously, multiple parameter possible Yes Yes



### 1209920 - TRUEscience Dissolved Oxygen starter kit includes:

- Grey SMART Cap with beaker clip and temperature sensor fitted
- Galvanic Disslved Oxygen Electrode, S7, no cable (1205232)
- Zero Oxygen solution 500ml (1205232)
- Spare battery covers (grey, teal, red and white)
- Battery for SMART Cap

# TRUESCIENCE SMART CAP FOR REDOX

The TRUEscience Oxidation Reduction Potential (ORP or REDOX Potential) measures an aqueous system's capacity to either release or accept electrons from chemical reactions. When a system tends to accept electrons, it is an oxidizing system. When it tends to release electrons, it is a reducing system. A system's reduction potential may change upon introduction of a new species or when the concentration of an existing species changes.

ORP/REDOX values are used much like pH values to determine water quality. Just as pH values indicate a system's relative state for receiving or donating hydrogen ions, ORP values characterize a system's relative state for gaining or losing electrons. ORP values are affected by all oxidizing and reducing agents, not just acids and bases that influence pH measurement.

The REDOX combination electrode consists of a platinum sensor and an Ag/AgCl reference half-cell built in standard 12mm electrode body. The measurements are displayed in millivolts (mV). Most REDOX measurements are made in dynamic environments where a reaction is taking place. Continuous or frequent monitoring using REDOX electrodes can be extremely useful in early detection of issues related to a change from the steady or "stable state" of any aqueous system. These reactions can be brought about by contamination or undesired chemical or environmental interference.

0-1000mV



# **TECHNICAL SPECIFICATION - REDOX**

Measuring range(mV) Resolution (mV) Standard recognition Temperature range mV range mV accuracy Temperature accuracy Store values Battery life Battery type Tablet and App requirements Dimensions of Cap Temperature probe length Weight Operating/storage temperature Colour keyed battery covers Multiple cap measurements Consumables ordering online Interval logging



+/- 0.1mV QR code input 0°C - 80.0°C +/- 1000mV +/- 0.1mV +/- 0.5°C 10,000 measurements/log 1 year normal use 1/2 AA lithium thionyl chloride, 3.6V, 1200mA See below or specified list of tested models on our website L218 x W48 x D24 mm including temperature probe 130mm long 91.5 J 0-55°C Yes Yes, up to 6 simultaneously, multiple parameter possible Yes Yes

### 1213484 - TRUEscience REDOX starter kit includes:

- White SMART Cap with beaker clip and temperature sensor fitted
- Epoxy combination redox Electrode, S7, no cable (1205230)
- Spare battery covers (grey, teal, red and white)
- Battery for SMART Cap

1205230 - Epoxy redox combination electrode



# UNIVERSAL PH PAPERS



Universal pH indicator paper available as 20 strip booklets or 5m roll dispenser packs with colour scale or dispenser refills for common lines.

• Rapid and precise readings

• Filter paper soaked with one or more pH indicators to provide appropriate colour change depending on requirements

Simply dip the paper into the liquid to be tested for a few seconds, remove and compare with the plastic covered colour scale printed on the cover for your reading. Alternatively drip the sample onto the paper for low volume samples. See each item for pH increment reading range.

### ORDERING INFORMATION

1171259	Camlab pH 1-14 Universal Indicator paper 7mm x 5m in dispenser
1171261	Camlab pH 1-14 Universal Indicator Paper 7mm x 5m Pack of 3 refills with scale
1171258	Camlab pH 1-11 Universal Indicator Paper 7mm x 5m in dispenser
1171260	Camlab pH 1-11 Universal Indicator Paper 7mm x 5m Pack of 3 refills with scale
1171268	Camlab pH 1-11 Universal Indicator Paper Pack of 200 (10 books x 20 strips)
1171262	Camlab pH 0.5-5.0 Universal Indicator Paper 7mm x 5m in dispenser with colour scale
1171263	Camlab pH 5.0-9.0 Universal Indicator Paper 7mm x 5m in dispenser with colour scale
1171264	Camlab pH 9.0-13.0 Universal Indicator Paper 7mm x 5m in dispenser with colour scale
1171265	Camlab pH 4.0-7.0 Universal Indicator Paper 7mm x 5m in dispenser with colour scale
1171266	Camlab pH 6.4-8.0 Universal Indicator Paper 7mm x 5m in dispenser with colour scale

# PH INDICATOR STRIPS

Non-bleeding indicator sticks for rapid reading of weakly buffered or strongly alkaline pH solutions.



### Advantages:

• Unlike conventional pH papers the indicator dyes used in these Camlab test sticks are fixed to the cellulose fibre pads, thus eliminating colour bleeding

• Can be left in weakly buffered solutions until the final reaction colour is obtained

### ORDERING INFORMATION - PACKS OF 100

1181409	Camlab pH Indicator Test Strips pHo-14
1192615	Camlab PH Indicator Test Strips pH o.o-6.o
1190995	Camlab pH Indicator Test Strips pH 0.5-5.0
1200667	Camlab pH Indicator Test Strips pH 4.5-9.0 CE Certified
1190996	Camlab pH Indicator Test Strips pH 5.5-9.0
1190997	Camlab pH Indicator Test Strips pH 9.5-13.0

# UNIVERSAL TEST PAPERS

Universal test papers in rolls or booklets for qualitative detection.

- Rapid determination of pH, nitrites, free chlorine etc • Ideal for schools
- Perfect for formulation work



### ORDERING INFORMATION

1171269	Litmus Blue Test paper reel 7mm x 5m
1171270	Litmus Red Test paper reel 7mm x 5m
1171273	Phenolpthalein Test paper Reel 7mm x 5m
1171271	Congo Red Test paper reel 7mm x 5m
1171272	Potassium Iodide Starch Test paper 7mm x 5m
1171274	Litmus Blue Test Paper Booklets Pack of 200 (10x20 strips)
1171275	Litmus Red Test Paper Booklets Pack of 200 (10x20 strips)
1198566	Phenolpthalein Test paper Booklets Pack of 200 (10x20 strips)
1171276	Potassium lodide Starch Test Paper Booklets (10 Books x 20 Strips)



# CAMLAB PH

# EPOXYTOUGH ELECTRODES PH/REDOX











Camlab EpoxyTough pH electrodes are tough epoxy bodied combination pH electrodes with a gel filling so you never need to worry about electrode maintenance or refilling again. They are compatible with nearly every pH meter straight out of the box or with a simple adapter cable.

- Low maintenance gel filled design
- Fast 95% Response in less than 1 second (bulb types)
- Single or double junction for demanding applications
- Choice of sizes and lengths available
- Flat and spear tip models for food and surface applications
- Standard models feature an extended body which protects the sensitive pH sensing bulb.

You can even use an EpoxyTough to stir your sample with to get a fast stable reading.

Available in single or double junction designs, spear tip, flat surface, micro and extended body versions, there is a Camlab EpoxyTough electrode to suit your requirements. A redox EpoxyTough probe is also available with BNC connector and 1 metre cable.

### ORDERING INFORMATION FOR COMBINATION ELECTRODES

1161693	EpoxyTough pH Electrode with BNC connector			
1161694	EpoxyTough Double Junction pH Electrode with BNC connector			
1161695	EpoxyTough Double Junction pH Electrode with DIN connector			
1161698	EpoxyTough Flat Double Junction pH Electrode with BNC connector			
1161696	EpoxyTough Long Double junction pH Electrode with BNC connector			
1161697	EpoxyTough Micro pH Electrode with BNC connector			
1161699	EpoxyTough Spear Tip pH Electrode with BNC connector			
1161700	EpoxyTough Double Junction REDOX probe with BNC Connector			

# CAMLAB PH ELECTRODES - RAPID PH RANGE



Camlab Rapid pH electrodes, unlike ordinary electrodes, provide fast, accurate, stable pH measurements, even with large sample temperature changes or low ionic strength.

Fast - response stable to 0.01 pH within 30 Seconds with temperature change of 35C to 75C

Accurate - to 0.04 pH between 0-100 Degrees C Stable - 0.005 pH or less drift per 24 hours Choose between Sealed or Refillable models Choose between Glass or Plastic body models Choice of Liquid or polymer junction

All Camlab Rapid electrodes are combination types with built-in double reference junctions which keep silver ions from contacting samples. Undesirable reactions with heavy metals, sulfides, and proteins are eliminated. Using Super Liquid junctions further protects and allows you to refresh the electrode for every use.

### ORDERING INFORMATION FOR COMBINATION ELECTRODES

1161705	Rapid pH Glass Environment combination pH electrode with BNC Connector
1161701	Rapid pH Epoxy combination electrode with BNC Connector
1161703	Rapid pH Epoxy Flat combination pH electrode with BNC connector
1161704	Rapid pH Glass Super Liquid Junction combination pH Electrode with BNC connector
1188196	Rapid pH Epoxy Double Junction flat combination pH electrode with S7 Connector
1188197	Rapid pH Glass Double Junction combination electrode with S7 Connector



camiab

# CAMLAB FILTER PAPERS



The camlab filtration range offers the same high quality performance of more expensive brands and is matched to well known grade types for easy selection and substitution.

# Cellulose Filter Papers at a glance

Use the charts below to quickly narrow down our range of cellulose filter papers by pore size, or see which grades are equivalent across different brands

Qualitative Filter Papers – for general filtration tasks
--

Whatman Grade	Camlab Grade	Pore size (µm)	Recommended uses / Application Notes	Additional Notes	Machery Nagel Equivalent Grade	Sartorius Equivalent Grade	Schleicher & Schuell (S&S) Equivalent Grade
<u>No 1</u>	<u>Grade 601</u>	11	The most widely used filter paper for routine applications with medium retention and flow rate.		MN 615	292	595
<u>No 2</u>	Grade 113	8	More absorbent than Grade 1 - utilized, for example, to hold soil nutrient in plant growth trials.	Pre-folded; Whatman <u>2V</u> or Camlab <u>113P</u>	MN 616	292a	597
<u>No 3</u>	<u>Grade</u> <u>1103</u>	6	Thicker paper and increased wet strength, making this grade ideal for use in Büchner funnels.		MN 618	3S/H	598
<u>No 4</u>	Grade 111	20 - 25	Fast filtering with retention of coarse particles, used as a rapid filter for routine clean-up of biological fluids or coarse precipitates like hydroxides.		MN 617	1288	604
<u>No 5</u>	Grade 118	2.5	Very fine particle retention. Used to clarify cloudy suspensions for water or soil analysis.		MN 619 de	-	602H
<u>No 6</u>	<u>Grade 114</u>	3	Twice as fast as Grade 5 with fine particle retention. Often specified for boiler water analysis applications.		-	-	594
<u>No 591</u>	-	7 - 12	Thick paper with high loading capacity. Offers high absorbency and increased wet strength.		-	-	-
Nos 91 93	-	10	Wet strengthened with intermediate pore size.		-	-	859
<u>No 113</u>	Grade 304	30	Wet strengthened, ultra high loading capacity, used for coarse or gelatinous precipitates. Fastest flow rate and thickest paper of the range.	Pre-folded; Whatman <u>113V</u> or Camlab <u>1101P</u>	-	-	520 b II
<u>No 114</u>	Grade 122	25	Wet strengthened, used for coarse or gelatinous precipitates. Smooth surface for precipitate recovery.	Pre-folded; Whatman <u>114V</u> or Camlab <u>122P</u>	-	-	503 (folded; 503 ½)
<u>No 595</u>	-	4 - 7	Thin paper used for routine analytical separations e.g. food extracts or solids in digested environmental samples	Pre-folded; Whatman <u>595.5</u>	-	-	-
<u>No 597</u>	-	4 - 7	For analytical routine applications e.g. fat content or CO <sub>2</sub> and turbidity removal from beverages.	Pre-folded; Whatman <u>597.5</u>	-	-	-
<u>No 602h</u>	-	< 2	Collecting very small particles and removing fine precipitates, e.g. residual sugar determination, HPLC or refractometric analysis.	Pre-folded; Whatman <u>602H.5</u>	-	-	-



# Cellulose Filter Papers at a glance

Quantitative Filter Papers - high purity for analytical work, or ashless for gravimetric analyses

Whatman Grade	Camlab Grade	Pore size (µm)	Recommended uses / Application Notes	Additional Notes	Machery Nagel Equivalent Grade	Sartorius Equivalent Grade	Schleicher & Schuell (S&S) Equivalent Grade
<u>No 40</u>	Grade 13	8	Gravimetric analysis, primary filter to separate solid matter in soil analysis, quantitative determination of sediment in milk		MN 640 md	389	589/5
<u>No 41</u>	Grade 11	20 - 25	The fastest quantitative paper, for coarse particles, gelatinous precipitate, or air pollution analysis		MN 640 w	388	589/1
<u>No 42</u>	Grade 15	2.5	The finest particle retention, used for barium sulphate precipitation, metastannic acid precipitation, or fine CaCO <sub>3</sub>		MN 640 d	393	589/3
<u>No 43</u>	Grade 12	16	Intermediate retention for foodstuffs or soil analysis or particle collection for air pollution monitoring		MN 640 m	389	589/2
<u>No 44</u>	Grade 14	3	A thin version of No 42, retains fine particles but with less ash weight per sample and nearly 2x flow rate		MN 640 dd	390	589/6
<u>No 50</u>	Grade 155	2.7	Hardened and slightly glazed surface, for retention of fine crystalline precipitates. Highly suited to vacuum filtration – withstands wet handling and scraping to remove precipitate		-	391	1575
<u>No 52</u>	Grade 153	7	General purpose hardened filter paper with medium retention and flow		-	392	1574
<u>No 54</u>	Grade 151	22	Fast filtration of coarse or gelatinous precipitates with high wet strength for vacuum filtration of difficult precipitates.		-	388	1573
<u>No 540</u>	Grade 53	8	General purpose hardened ashless paper with medium retention and flow. Extremely pure and strong hard surface.		-	392	1506 or 589/2
<u>No 541</u>	<u>Grade 51</u>	22	Fast filtration of coarse particles and gelatinous precipitates in acid/alkali solutions during gravimetric analysis.		-	388	1505 or 589/1
<u>No 542</u>	Grade 55	2.7	High retention of fine particles. Hard, strong surface with excellent chemical resistance.		-	391	1507
<u>No 589/1</u>	-	12-25	The established standard for coarse precipitate qualitative analysis, e.g. ash content of food, Blaine test in cement		-	-	-
<u>No 589/2</u>	-	4-12	Ashless paper for medium-fine precipitates. Used for sand content in foodstuff, flour grades, and aqueous suspensions in the paper industry.		-	-	-
<u>No 589/3</u>	-	2	Slow filtration with high efficiency in collecting small particles.		-	-	-

# QUALITATIVE FILTER PAPERS



Qualitative filter papers in circles, sheets and reels. Where possible the nearest Whatman equivalent number is also stated to aid selection.

### GRADE 601 (No.1 EQUIVALENT)

General purpose filter paper for routine applications in laboratory analysis. This is a widely used filter paper with medium retention and flow rate. Frequently used for clarifying liquids, qualitative analytical separations for precipitate and soil analysis.

### Properties:

• Weight [g/m2]	73
<ul> <li>Thickness [mm]</li> </ul>	0.16
<ul> <li>Pore size [μm]</li> </ul>	5-13
<ul> <li>Filtration Velocity</li> </ul>	88sec
Burst Strength	1.95kg/sqcm

• Burst Strength

### GRADE 113 (No.2 EQUIVALENT)

Qualitative filter paper, suitable for the fast filtration of liquids with fine particles. These extremely pure Camlab filter papers use cellulose with an alpha content of nearly 100% according to precise norms and have an ash content of approximately 0.06%

### Properties:

- Weight [g/m2]
- Thickness [mm]
- Pore size [µm]
- Filtration Velocity Burst Strength
- 8-12 50sec >30kg/sqcm

87

0.18

### GRADE 1103 (No.3 EQUIVALENT)

Thick smooth wet strengthened technical paper suitable for the removal of fine particles. Applications include dyes, ether, alcoholic solutions, Eau de cologne, salted solutions, vegetable extracts, hair solutions, perfumes, tinctures, saccharine juices, vinegar etc

### **Properties:**

- Weight [g/m2]
- Thickness [mm]
- Pore size [µm]
- Filtration Velocity
- Burst Strength
- 0.3 12-16 65sec 3.9kg/sqcm

150

### GRADE 111 (No.4 + No.54 EQUIVALENT)

Qualitative filter paper, suitable for coarse and voluminous precipitates like hydroxides and sulphides. These extremely pure Camlab filter papers use cellulose with an alpha content of nearly 100% according to precise norms and have an ash content of approximately 0.06%

80

0.21

15-20

10sec

>20kg/sqcm

### Properties:

- Weight [g/m2]
- Thickness [mm] Pore size [µm]
- Filtration Velocity
- Burst Strength

### **GRADE 118** (No.5 EQUIVALENT)

Fine particle filtration, capable of retaining the fine precipitates encountered in chemical analysis. Slow flow rate, excellent clarifying filter for cloudy suspensions and for water and soil analysis.

### Properties:

• Weight [g/m2] • Thickness [mm] • Pore size [µm]

Filtration Velocity

Burst Strength

80 0.15 2 2005ec 0.9kg/sqcm

# GRADE 114 (No.6 EQUIVALENT)

Qualitative filter paper, suitable for the filtration of fine precipitates such as nickel sulphide, lead dioxide and calcium fluoride. These extremely pure Camlab filter papers use cellulose with an alpha content of nearly 100% according to precise norms and have an ash content of approximately 0.06%

### Properties:

- Weight [g/m2] Thickness [mm]
- Pore size [µm]
- Filtration Velocity
- Burst Strength

80 0.16 4-7 100sec >20kg/sqcm



# QUALITATIVE FILTER PAPERS CONT...



Qualitative papers are also available in special formats such as creped, and pre folded.

### GRADE 113P (No.2V EQUIVALENT)

Pre Folded Qualitative filter paper, suitable for the fast filtration of liquids with fine particles. These extremely pure Camlab filter papers use cellulose with an alpha content of nearly 100% according to precise norms and have an ash content of approximately 0.06%

87

### **Properties:**

- Weight [g/m2]
- Thickness [mm]
- Pore size [µm]
- Filtration VelocityBurst Strength
- 0.18 8.12 50sec >30kg/sqcm
- th >

### GRADE 304 (No.113 EQUIVALENT)

Creped Qualitative filter paper for general use. Made from 100% Cellulose and binder free. These filter papers are ideal for general use in schools, hospitals, research labs, pharmaceutical and chemical industries, cosmetic and food labs and for gas detection. Ash content = 0.10%

0.35

40

11sec

зPsi

### Properties:

- Weight [g/m2] 120
- Thickness [mm]
- Pore size [µm]Filtration Velocity
- Burst Strength
- 2

# GRADE 122 (No.114 EQUIVALENT)

General purpose filter paper for general applications in Hospitals, Research Labs, Schools and Chemical industries.

### Properties:

- Weight [g/m2]
- Thickness [mm]
- Pore size [µm]
- Filtration Velocity
- Burst Strength
- 84 0.17 17-30 22sec 1.25kg/sqcm

# GRADE 1101P (No.113V EQUIVALENT)

Camlab Grade 1101P pre-folded general purpose filter papers are equivalent to Whatman Grade 113V. These papers are very thick and strong with creped surfaces ideal for high loading capacity. They are supplied pre-folded for ultimate convenience.

### **Properties:**

• Weight [g/m2]	160
<ul> <li>Thickness [mm]</li> </ul>	0.55
<ul> <li>Pore size [μm]</li> </ul>	38-75
<ul> <li>Filtration Velocity</li> </ul>	26sec

### GRADE 122P (No.114V EQUIVALENT)

Camlab Grade 122P pre-folded general purpose filter papers are equivalent to Whatman Grade 114V. These papers are strong with smooth surfaces, have a very fast filtration velocity and are suitable for coarse particles & gelatinous precipitates as well as for general laboratory use. They are supplied pre-folded for ultimate convenience.

84

0.17

17-30

22sec

1.25kg/sqcm

### **Properties:**

- Weight [g/m2]
- Thickness [mm]
- Pore size [μm]
- Filtration Velocity
- Burst Strength

# GRADE 918 (BLACK)

Filter paper stained with a sulphured colouring used for reveal the particles of bright colour. Applications include detection of fluorine or silicon and Mycelium in cultivated mushrooms

### **Properties:**

•	Weight [g/m2]	85
•	Thickness [mm]	0.17
•	Filtration Velocity	45sec

# QUANTITATIVE ASHLESS FILTER PAPERS



Quantitative filter papers in circle, sheet and reel format. For use where you wish to analyse the filtered substance after ashing in a furnace.

Available in ashless, hardened low ash and hardened ashless versions.

# GRADE 13 (No.40 EQUIVALENT)

Medium pored filter paper used for fine precipitates such as magnesium ammonium phosphate, calcium oxalate, magnesium ammonium arsenate, coarser forms of barium sulphate. Our ashless quantitative filter papers are made with 100% cotton, as quantitative analysis requires a high purity paper these are washed out with acid and finally cleaned with demineralised water. The ash content is 0.007%

84

5-8

0.16

50sec

>0.20kg/sqcm

### Properties:

•	Weight [g/m2]
•	Thickness [mm]
•	Pore size [um]

- Filtration Velocity
- Burst Strength

# GRADE 11 (No.41 EQUIVALENT)

Wide pore filter paper used for coarse and voluminous precipitates such as iron - aluminium - and chromium hydroxide or Si determination in steel and pig iron analysis. Our ashless quantitative filter papers are made with 100% cotton linters. As quantitative analysis requires a high purity paper these are washed out with acid and finally cleaned with demineralised water. The ash content is 0.007%

84

### Properties:

- Weight [g/m2]
- Thickness [mm]
- Pore size [µm]
- Filtration Velocity
- Burst Strength

### 0.18 12-15 10sec >0.20kg/sqcm

# GRADE 15 (No.42 EQUIVALENT)

Fine pore filter paper used for extremely difficult filtration conditions such as cold barium sulphate, metastannic acid, cuprous oxide. Our ashless quantitative filter papers are made with 100% cotton linters. As quantitative analysis requires a high purity paper these are washed out with acid and finally cleaned with demineralised water. The ash content is 0.007%

### Properties:

84
0.14
2-3
18osec
>0.20kg/sqcm

# GRADE 12 (No.43 EQUIVALENT)

Most commonly used for grade for coarser precipitates such as lead- iron- and silver sulphide, alkali carbonates, lead chromate, arsenic, antimony, cadmium and food stuffs. Our ashless quantitative filter papers are made with 100% cotton linters. As quantitative analysis requires a high purity paper these are washed out with acid and finally cleaned with demineralised water. The ash content is 0.007%

### Properties:

- Weight [g/m2]
- Thickness [mm]
  Pore size [µm]
- Filtration Velocity
- Burst Strength
- 84 0.17 8-12 20sec <0.20kg/sqcm

### GRADE 14 (No.44 EQUIVALENT)

Narrow pore filter paper used in fine precipitates such as lead dioxide, calcium fluoride, nickel sulphide, zinc sulphide, dioxide and molybdate of lead. Our ashless quantitative filter papers are made with 100% cotton linters. As quantitative analysis requires a high purity paper these are washed out with acid and finally cleaned with demineralised water. The ash content is 0.007%. They are supplied prefolded for ultimate convenience.

### Properties:

5
;
05

Burst Strength

84
0.15
3-5
loosec
>0.20kg/sqcm

# FILTRATION

# QUANTITATIVE ASHLESS HARDENED FILTER PAPERS



Quantitative filter papers in circle, sheet and reel format. For use where you wish to analyse the filtered substance after ashing in a furnace.

Available in ashless, hardened low ash and hardened ashless versions.

# GRADE 155 (No.50 EQUIVALENT)

Qualitative filter paper, suitable for the fast filtration of liquids with fine particles. These extremely pure Camlab filter papers use cellulose with an alpha content of nearly 100% according to precise norms and have an ash content of approximately 0.06%

80

0.16

2-4

200sec

>20kg/sqcm

### Properties

- Weight [g/m2]
- Thickness [mm]
- Pore size [µm]
- Filtration Velocity
- Burst Strength

# GRADE 153 (No.52 EQUIVALENT)

Hardened Qualitative filter paper, suitable for analysis in acid solutions or for filtration under high pressure. These extremely pure Camlab filter papers use cellulose with an alpha content of nearly 100% according to precise norms and have an ash content of approximately 0.06%

### Properties

• Weight [g/m2] 84 • Thickness [mm] 0.15 • Pore size [µm] 5-8 • Filtration Velocity 50sec >0.30kg/sqcm • Burst Strength

### GRADE 55 (No.542 EQUIVALENT)

Wet strengthened papers used for acid solutions analysis and for filtration under high pressure. Our ashless quantitative filter papers are made with 100% cotton linters. As quantitative analysis requires a high purity paper these are washed out with acid and finally cleaned with demineralised water. The ash content is 0.007%

### Properties

- Weight [g/m2] 84 • Thickness [mm] 0.14 • Pore size [µm] 2-3 • Filtration Velocity 180sec >0.20kg/sqcm
- Burst Strength

# GRADE 53 (No.540 EQUIVALENT)

Wet strengthened papers used for acid solutions analysis and for filtration under high pressure. Our ashless quantitative filter papers are made with 100% cotton linters. As quantitative analysis requires a high purity paper these are washed out with acid and finally cleaned with demineralised water. The ash content is 0.007%

84

0.16

5-8

50sec

>0.20kg/sqcm

### Properties

• Weight [g/m2]	
<ul> <li>Thickness [mm]</li> </ul>	
<ul> <li>Pore size [µm]</li> </ul>	

- Filtration Velocity
- Burst Strength

# GRADE 51 (No.541 EQUIVALENT)

Wet strengthened papers used for acid solutions analysis and for filtration under high pressure. Our ashless quantitative filter papers are made with 100% cotton linters. As quantitative analysis requires a high purity paper these are washed out with acid and finally cleaned with demineralised water. The ash content is 0.007%

### Properties

• Weight [g/m2]	84
<ul> <li>Thickness [mm]</li> </ul>	0.18
<ul> <li>Pore size [μm]</li> </ul>	12-15
<ul> <li>Filtration Velocity</li> </ul>	10sec
<ul> <li>Burst Strength</li> </ul>	>0.20kg/sqcm

∕∂www.camlab.co.uk



# EXTRACTION THIMBLES



Cellulose extraction thimbles for general use. Please note, glassware not included and is pictured for illustrative purposes only.

# MEMBRANE FILTERS



Using membrane filters offers flexibility and cost saving when used with proprietary filter holders. They have accurately controlled pore size distribution and high strength and flexibility which ensure reproducibility and consistency. Our membrane filter range includes pore sizes from 0.015 to 12 µm with a wide selection of membrane filters.

# THIMBLES

Made with 100% high pure cotton linters fibres, they are neutral and fat free and offer high mechanical strength and excellent retention capacity. Suitable for all extractors systems.

### Applications:

- Extraction of sulphur in gaseous masses
- Determination by soxhlet extraction of the content of free lipids in food
- Determination of dust and tar in industrial air and gases
- Lacquer and binder analysis in paint colours.
- Control of emission smokes in industrial chimneys
- Gravimetric analysis of dust in gases

### ORDERING INFORMATION FOR EXTRACTION THIMBLES

1180862	18x55mmpPack of 25
1181863	19x90mm pack of 25
1180864	22x8omm pack of 25
1180865	25x8omm pack of 25
1180866	25x100mm pack of 25
1180867	26x6omm pack of 25
1180868	28x8omm pack of 25
1180869	28x100mm pack of 25
1180870	28x120mm pack of 25
1180871	30x80mm pack of 25
1180872	30x100mm pack of 25
1180873	33x8omm pack of 25
1180874	33x94mm pack of 25
1180875	33x100mm pack of 25
1180876	33x118mm pack of 25
1180877	37x130mm pack of 25
1180878	41x123mm pack of 25
1180879	43x123mm pack of 25
1180880	58x170mm pack of 25

# CELLULOSE ACETATE

They have high filtration rates and are naturally hydrophilic. With good thermal stability and a weak fixation of proteins.

They are suitable for biological, aqueous samples and for filtering proteins and enzymes.

# NYLON

Naturally hydrophilic, nylon membranes are used for aqueous samples, alkaline or organic and filtration of HPLC samples.

Equivalent to Whatman Nylon membrane filters

# PTFE

Can be used in air and gas filtration or for chemically aggressive or acid samples. For the filtration of aqueous solutions, you should wet the membrane with isopropanol first.

# POLYCARBONATE (NUCLEPORE ALTERNATIVE)

• Track-etched PC membranes are manufactured from highquality polycarbonate film.

• They have a smooth flat surface and exhibit very low extractable levels.

• Due to their sharply defined pore sizes, high flow rates and excellent chemical and thermal resistance.

• Applications include: Environmental analysis (water, air), Analysis of biological cells and particulate, Fluids clarification, fuel, cytology, parasitology, bioassays, epifluorescence microscopy

# FILTRATION

# SYRINGE FILTERS



Disposable syringe filter devices designed to provide fast and efficient filtration of aqueous and organic solutions. They are made with a wide variety of different membrane filters with a polypropylene housing using the most advanced methods and design features. Available in 13, 25 and 33mm sizes, contact Camlab for further details.

\*Bubble point: pressure required for a liquid to flow through a dry filter membrane. For liquid to flow through the membrane the bubble point pressure must be overcome. If bubble point pressure cannot be attained with a certain combination of liquid, filter membrane and vacuum increasing the pore size is a solution.

### PES

A range of economical, disposable and extremely easy to use PES syringe filters. Designed with female luer lock inlet and male luer slip outlets.

Sterile filters are RNase, DNase, DNA and pyrogen free and are individually wrapped. Packs of 1000 filters are packaged in clear bags.

### Applications:

Good for use in aqueous applications and biological samples Low binding to proteins and nucleic acid

Tissue culture additive and media filtration

Low affinity for proteins and extractable with substantially faster flow rates than  $\mathsf{PVDF}$ 

### Properties

Porosity	0.2µm	0.45µm
Membrane type	Hydrophilic	Hydrophilic
Water Flow	21 m³/m²/hr/bar	36 m³/m²/hr/bar
Bubble point*	430kPa	300kPa
pH range	рН 4-8	рН 4-8
Max operatingºC	Up to 90ºC	Up to 90ºC

Chemical resistance to most hydrophilic fluids.

# NYLON POLYAMIDE

A range of economical, disposable and extremely easy to use Nylon syringe filters. Designed with female luer lock inlet and male luer slip outlets.

Sterile filters are RNase, DNase, DNA and pyrogen free and are individually wrapped. Packs of 1000 filters are packaged in clear bags.

### **Applications:**

Filtration of aqueous and organic solutions in HPLC. GC or dissolution analysis

Filtration and clarification of solvents

Sterilization and clarification of biological fluids, buffer solutions and tissue culture medias

Universal application for analytical procedures

For high protein binding and high dirt loading capacity.

### Properties

Porosity	0.2µm
Membrane type	Hydrophobic
Water Flow	23ml/min/cm <sup>3</sup>
Bubble point*	340kPa
pH range pH	3-14pH
Max operating⁰C	Up to 130ºC

Hydrophobic 46ml/min/cm<sup>3</sup> 220kPa 3-14pH Up to 130ºC

0.45um

Chemical resistance to most organic solvents and alkaline liquids.

# PTFE

A range of economical, disposable and extremely easy to use PTFE syringe filters. Designed with female luer lock inlet and male luer slip outlets.

Sterile filters are RNase, DNase, DNA and pyrogen free and are individually wrapped. Packs of 1000 filters are packaged in clear bags.

### Applications:

Broad Chemical Compatibility Strong chemical compatibility and inertia Filtration of air and gases Preparation of HPLC or GC samples

### Properties

Porosity	0.2µm	0.45µm
Membrane type	Hydrophobic	Hydrophobic
Water Flow	17-23 ml/min/cm <sup>3</sup>	30-43 ml/min/cm <sup>3</sup>
Bubble point*	120kPa	80kPa
pH range	рН 1-14	рН 1-14
Max operating⁰C	Up to 130ºC	Up to 130ºC

Chemical resistance to most organic solvents and alkaline liquids.

# PVDF

A range of economical, disposable and extremely easy to use PVDF syringe filters. Designed with female luer lock inlet and male luer slip outlets.

Sterile filters are RNase, DNase, DNA and pyrogen free and are individually wrapped. Packs of 1000 filters are packaged in clear bags.

### Applications:

Filtration of most organic solvents and chemical solutions that are extremely corrosive where maximising protein recovery is vital. Extremely low protein-binding applications Gas and Vapour filtration Medicine filtration High thermal and high temperature filtration techniques

### Properties

Porosity Membrane type Isopropanol Flow Bubble point pH range pH Max operating<sup>o</sup>C o.2µm Hydrophobic 9-12 ml/min/cm<sup>2</sup> 12okPa 1-14 pH Up to 85°C

o.45µm Hydrophobic 17-23 ml/min/ cm<sup>2</sup> 80kPa 1-14 Up to 85°C

Chemical resistance to most organic solvents and aggressive liquids



# MCE

A range of economical, disposable and extremely easy to use MCE syringe filters. Designed with female luer lock inlet and male luer slip outlets.

Sterile filters are RNase, DNase, DNA and pyrogen free and are individually wrapped. Packs of 1000 filters are packaged in clear bags.

# Applications:

Filtration and tissue culture medias and additives Clarification of biological fluids Filtration of Proteins, enzymes and other aqueous

solutions

Gas particulate and bacteria filtration

Offers higher protein binding than cellulose acetate A good choice for general purpose filtration of aqueous solutions

### Properties

Porosity0.2μmMembrane typeHydrophilicWater Flow8.5ml/min/cm²pH rangepH 4-8Max operating⁰C110°CStrengthGood

0.45µm Hydrophilic 22 ml/min/ cm<sup>2</sup> pH 4-8 110ºC Good

Chemical resistance to most organic solvents and alkaline liquids.

# REGENERATED CELLULOSE

Good mechanical resistance and weak absorption Measure of diffusion of light Hydrophilic membrane

### Properties

Porosity 0.2µm Water flow : 23 ml/min/cm2 Bubble point : 340 kPa

0.45µm 46 ml/min/cm2 220 kPa

Resistance against most of organic solutions Chemical compatibility : pH 3-7

# VACUUM FILTRATION

Filtration system 316 stainless steel designed to filter 3 samples at the same time.

Included in kit: 300ml funnels, aluminium clamp, valves in PTFE suitable for 47mm or 50mm membranes.

### Note: Requires pump



# **BENCH PROTECTION**

Benchkote is a high quality white absorbent paper, laminated with an impermeable layer of polyethylene. The Benchkote range protect laboratory surfaces against hazardous spills.

- Material is very strong, making it tear resistant when wet or dry
- Smooth white surface can be written on with ink or pencil and lies perfectly flat on the bench
- Suitable for saturation with disinfectant to protect
- benches where pathogens and other bacteria are presentUse polyethylene side up to collect spills without
- absorption

• The paper side quickly absorbs liquid spills, preventing the liquids from reaching the work surface

• Can be incinerated after use, or disposed of according to local regulations



# LENS CLEANING TISSUES

The Camlab Type 913 range of high quality lens cleaning tissue papers, are equivalent to Whatman Type 105 papers. They are chemically pure and free from silicones and other additives.

Camlab lens tissue papers are ideal for use with optical camera and microscopes lenses due to their high absorbency. This absorbency ensures the safe removal of surface moisture, grease and dust. Their softness ensures scratch free results every time.



# CHROMATOGRAPHY PAPER

Produced with high quality cotton liners, the chromatography papers allow to absorb samples more or less important depending on the thickness of the grade.

For the finest filtration results, use grade CH51 for routine and simple analysis.

- Weight (g/m2) DIN 53104: 90
- Thickness (mm): 0.20
- Capillary rise (mm/30min): 120-130



# FILTRATION

# **GLASS MICRO FIBRE FILTERS**

They are manufactured from 100% borosilicate micro-glass fibres, and are binder free. Due to their very fine micro fibres these filters are particularly suitable for micro-filtration. They can be used in various fields from filtration of industrial water, ligand banding testing, solvent filtration, sample filtration, suspended solids in water (EN872) etc through to cell collection.

- Chemical resistance to most solvents and reagents (except Hydrofluoric acid)
- Excellent level of particle retention
- Large load capacity
- Non-hygroscopic and biologically inert
- High permeability against passing air
- Temperature resistant up to 500°C



### GRADE 259 (GF/A EQUIVALENT)

The Camlab Grade 259 range of glass micro fibre filter papers with 1.6µm pore size are equivalent to Whatman Grade GF/A filters. They are manufactured from 100% borosilicate micro-glass fibres, and are binder free. Due to their very fine micro fibres these filters are particularly suitable for micro-filtration. They can be used in various fields from filtration of industrial water, ligand banding testing, solvent filtration, sample filtration, suspended solids in water (EN872) etc through to cell collection.

### Properties

- Weight [g/m2]
- Thickness [mm]
- Pore size [µm] • Filtration Velocity
- Burst Strength

### 52 0.26 1.6 6osec 20kPa

# GRADE 260 (GF/B EQUIVALENT)

The Camlab Grade 260 range of glass micro fibre filter papers with 1.0µm pore size are equivalent to Whatman Grade GF/B filters. They are manufactured from 100% borosilicate micro-glass fibres, and are binder free. Due to their very fine micro fibres these filters are particularly suitable for micro-filtration. They can be used in various fields from filtration of industrial water, ligand banding testing, solvent filtration, sample filtration, suspended solids in water (EN872) etc through to cell collection.

### Properties

	Weight [g/m2]	
•		

<ul> <li>Thickness</li> </ul>	[mm]
-------------------------------	------

- Pore size [µm]
- Filtration Velocity
- Burst Strength

0	<b>D.</b> 7
	1
2	200sec
5	50kPa

143

# GRADE 261 (GF/C EQUIVALENT)

The Camlab Grade 261 range of glass microfibre filter papers with 1.2µm pore size are equivalent to Whatman Grade GF/C filters. They are manufactured from 100% borosilicate micro-glass fibres, and are binder free. Due to their very fine micro fibres these filters are particularly suitable for microfiltration. They can be used in various fields from filtration of industrial water, ligand banding testing, solvent filtration, sample filtration, suspended solids in water (EN872) etc through to cell collection.

52

0.26

100sec

20kPa

1.2

### Properties

- Weight [g/m2]
- Thickness [mm]
- Pore size [um]
- Filtration Velocity
- Burst Strength

GRADE 262 (GF/D EQUIVALENT)

The Camlab Grade 262 range of glass micro fibre filter papers with 2.7µm pore size are equivalent to Whatman Grade GF/D filters. Made from 100% borosilicate micro-glass fibres, these filters are binder free and due to their very fine fibres they are particularly suitable for micro-filtration. They can be used in various fields from filtration of industrial water, ligand banding testing, solvent filtration, sample filtration, suspended solids in water (EN872) etc through to cell collection.

### Properties

• Weight [g/m2]	120
<ul> <li>Thickness [mm]</li> </ul>	0.53
• Pore size [μm]	2-7
<ul> <li>Filtration Velocity</li> </ul>	30sec
<ul> <li>Burst Strength</li> </ul>	20kPa

• Burst Strength

Awww.camlab.co.uk

001954 233100

# FILTRATION



# GRADE 263 (GF/F EQUIVALENT)

The Camlab Grade 263 range of glass micro fibre filter papers with 0.7 $\mu$ m pore size are equivalent to Whatman Grade GF/F filters. Made from 100% borosilicate microglass fibres, these filters are binder free and due to their very fine fibres they are particularly suitable for microfiltration. They can be used in various fields from filtration of industrial water, ligand banding testing, solvent filtration, sample filtration, suspended solids in water (EN872) etc through to cell collection.

### Properties

- Weight [g/m2]
- Thickness [mm]
- Pore size [μm]Filtration Velocity
- Burst Strength
- 0.7 310sec 50kPa

75

0.45

### GRADE 264 (934-AH EQUIVALENT)

Made from 100% borosilicate micro-glass fibres, these filters are binder free and due to their very fine fibres they are particularly suitable for micro-filtration. They can be used in various fields from filtration of industrial water, ligand banding testing, solvent filtration, sample filtration, suspended solids in water (EN872) etc through to cell collection.

### Properties

- Weight [g/m2]
- Thickness [mm]
- Pore size [µm]
- Filtration Velocity
- Burst Strength
- 1.5 60sec 20kPa

0.28

65

# GRADE 293 (QM-A EQUIVALENT)

Made from 100% pure micro-quartz fibres, these filters are binder free. They can be used in various fields from emission control of chimney smokes, exhaust gases and aerosols to the control of suspended lead particles in air.

85

Low heavy metals content Temperature resistant up to 900°C

### Properties

• Weight [g/m2]



# D3024 & D3024R (REFRIGERATED) MICRO CENTRIFUGE



A choice of standard and refrigerated benchtop centrifuges for everyday - comes as standard with the AS24-2 rotor

Features:

- User-friendly large LCD display provides all visual information
- Quiet and stable operation benefit lab environment
- Brushless motor drives quickly and effortlessly accelerates the rotor to set speed
- Fully autoclavable Bio-safe rotor
- Dual door interlock design for safety
- Gently braking at low speed creates better separation

### Specifications:

- Max. Speed: 15000rpm (200-15000rpm), in increments of 10rpm
- Max. RCF: 21380×g, increments of 10×g
- Run Time: 30sec~99min~HOLD (continuous operation)
- Temperature Range (D3024R): -20°C to +40°C
- Driving Motor: Brushless motor
- Additional Features: speed/acceleration switch; short-time run function; sound-alert function
- Safety Devices: dual door interlock, over-speed detector
- Over-temperature detector;
- Automatic internal diagnosis

# DM0412 CLINICAL CENTRIFUGE

The DM0412 Clinical Centrifuge is ideal for the separation of serum, plasma, urea, blood samples and other routine applications in hospital and research laboratories. Comes with a 8 x 15ml place rotor.

- Speed 300-45000 rpm, 100rpm increments
- Max RCF: 2490xg
- Rotor Capacity: 8 x 15ml
- Timer: 30 secs to 99 minutes
- Micro-computer control, that gives high accuracy speed control
- Digital LCD display, can show the real-time parameters and have the symbol showing the experimental process
- Set and display rotor speed shown in RPM and G-force
- Brushless DC motor, it is no pollution and free maintenance
- The short spin function is used for quick spins by pressing and holding the PULSE key

• Built with electrical lock, automatic release the lid when rotor stops to save processing time and prevents samples overheating



• Go into ta self-diagnostic check when switched on and then displays accumulative running time and last running parameters

### ORDERING INFORMATION

1196838 DM0412 Clinical Centrifuge with 8x15ml Place Rotor



- AS36-05 Rotor suitable for:
  - 0.5ml x 36
  - 0.2ml x 36



AS24-2 Rotor suitable for: • 2ml/1.5ml x 24 • 0.2ml x 24

• 0.5ml x 24



AS4-PCR8 Rotor suitable for: • 0.2ml/PCR8 x 4



AS18-5 Rotor suitable for: • 5ml x 18

### ORDERING INFORMATION

1187712	D3024 Micro Centrifuge including rotor for 24x2ml Microtube
1187713	D3024R Refrigerated Micro-Centrifuge inc. rotor 24x2ml Microtube
1189996	AS36-05 Rotor
1189995	AS24-2 Rotor
1188581	AS4-PCR8 Rotor
1225483	AS18-5 Rotor
1225277	AS12-5V Rotor (suitable for 5ml x 1 eppendorf tubes)
1188576	0.2ml rotor adaptor set for A12-2 & AS24-2 rotor pack of 24
1188578	0.5ml rotor adaptor set for A12-2 & AS24-2 rotor pack of 24
1190940	0.2ml rotor adaptor used with AS36-05 rotor 36pcs/pk
1191818	Rotor Adapter Remover for A02P2 Rotor - D3024 & D3024R
1191819	Rotor Adapter Remover for A05P2 Rotor for D3024 & D3024R

# **8 PLACE MINI CENTRIFUGES**

The 8-place Camlab Choice D1008 microfuge is available in a choice of colours. Each centrifuge is supplied complete with rotors, ideal for quick spin downs of microtubes and PCR tubes.

- High speed, small orbiting action ideal for microtitre plates
- Maximum Speed: 7000rpm/260xg
- Supplied with an 8 place 1.5/2.oml
- microtube rotor and 0.2/0.5ml PCR rotc • Compact design
- Universal voltage
- 2 year warranty
- Weight 2.1 lbs
- Dimensions: (LxWxH) 150x150x125mm

### ORDERING INFORMATION

1190944	D1008 Mini Centrifuge with Blue Lid
1190945	D1008 Mini Centrifuge with Green Lid

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്†www.camlab.co.uk

<u>sales@camlab.co.uk</u>

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# D2012 PLUS MINI CENTRIFUGE



Features:

- Includes 12 x 1.5/2ml, 12 x o. rotor as standard
  User-friendly large LCD display provides all visual
- information
- Brushless motor drives quickly and effortlessly accelerates the rotor to set speed
- Unique cooling design, minimises rotor heating
- Fully autoclavable polypropylene rotor
- Compact design to save valuable space
- High speed, low noise less than db(A)

# MS-S MAGNETIC STIRRER

# Magnetic stirrer with ceramic coated work plate

- Speed range of o-1500rpm
- Max. stirring quantity 20L
- Diameter of work plate 135mm
- Max magnetic bar length: 80mm
- Stainless steel with ceramic coated
- hotplate provides chemical and scratch resistanceHigh magnetic adhesion prevents stirrer spin bar
- releaseEnclosed assembly with protection class IP42
- Brushless DC motor is maintenance free and
- explosion-proof

Includes stirrer bar 50mm x 8mm, power lead and user manual

### ORDERING INFORMATION

1189930 MS-S Classic Magnetic Stirrer Ceramic Coated Stainless Steel

# ECOSTIR MAGNETIC STIRRER

Magnetic stirrer with ceramic coated work plate

- Speed range of 300-2000rpm
- Max. stirring quantity 1.5L
- Diameter of work plate 120mm
- Max magnetic bar length: 40mm
- PET top provides excellent chemical resistance
- Ultra quiet and vibration-free design

Includes detachable probe holder for external sensors.

### ORDERING INFORMATION

1209069 Ecostir Laboratory Magnetic Stirrer

### Specifications:

• Max. Speed: 15000rpm (200-15000rp) increment: 10rpm • Max. RCF: 15100×g, increment: 100×g 21380×g, increment: 10×g

- Rotor: 1.5/2ml×12
- Run Time: 30sec~99min~HOLD (Continuous operation)
- Power: Single-phase, AC110V~220V, 50Hz/60Hz, 3A
- Dimensions (mm): (L) 255 × (W) 245 × (H) 140
   Additional features: Speed/Acceleration switch; Short-
- time run function; sound-alert function
- Safety Devices: Dual door interlock, Over-speed detector; Over-temperature detector; Automatic internal diagnosis

### ORDERING INFORMATION

 1187711
 D2012 Plus Mini Centrifuge including plastic rotor

 1191860
 A12-2P-Plastic rotor kit for D2012 with lid, fixing clips & O ring

# FLATSPIN MAGNETIC STIRRER

Ultra-flat compact magnetic stirrer which provides excellent mixing

- Speed range of 15-1500rpm
- Automatic reverse rotation for excellent mixing
- High IP protection class (IP 65)
- Plate is made from chemically resistant materials
- Slip-resistant and stable
- Speed range: 15-1500rpm
- Max stirring quantity (H2O): 0.8L
- Max load capacity: 2kg
- Dimension of work plate: 90x90mm
- Material: ABS
- Dimension WxDxH: 175x120x15
- Voltage: 100-240
- Frequency: 50/60 Hz
- Permissible relative temperature: 5-40°C
- Permissible relative humidity 80%
- DIN EN60529: IP65

### ORDERING INFORMATION

1201872 FlatSpin 3.5" Ultra-flat Compact Magnetic Stirrer

Visit www.camlab.co.uk to see our full range of magnetic stirring bars





# MAGNETIC HOTPLATE STIRRERS



- MS-H280-Pro Round ceramic coated Steel Hotplate/Stirrer with Double LED Display
- Basic hotplate stirrer with a round top and 3L maximum stirring capacity.
- Speed range 100-1500rpm
- Heating temperature up to 280°C
- Optional external temperature sensor PT1000 is available with control accuracy of  $\pm 1^{\circ}$ C, real-time control of the temperature of the stirred sample
- Dual LED display for simultaneous temperature and speed readings
- ≥50°C 'HOT' warning text is shown on the LED display indicating residual hotplate temperature
- ABS casing with fire retardant material, give some chemical resistance to weak acid and alkali

### MS7-H550-S - Ceramic 7" Square Hotplate/Stirrer with Digital LED Display

- LED displays target and actual temperatures
- Speed range is o-1500rpm
- Temperature up to 550°C
- Max magnetic stirrer bar (Lx∅): 80mm
- Separate safety circuits with fixed safety cut off temperature of 580°C
- Plug and play PT1000 external temperature sensor is available
- Control accuracy is ±0.5°C
- "HOT" indicator warning, even if switched off



### MS7-H550-Pro - Ceramic 7" Square Hotplate/Stirrer with Digital LCD Display

- Backlit LCD display for precise monitoring of speed and temperature
- Built in PID controller ensures maximum heat-up times while preventing an over temperature of the sample
- Separate safety circuits with fixed safety temperature of 580°C
- Plug and play PT1000 sensor accessory for precise temperature control. Control accuracy:  $\pm 0.2^{\circ}\text{C}$
- Excellent heat control accuracy of the work plate: ±1(<100°C) ±1%(>100°C)
- Electronic speed control, the max speed is 1500rpm
- Brushless DC motor is maintenance free, explosion proofed with accurate speed control
- Independent control knobs for adjusting the speed and temperature
- "HOT" indicator warning even if switched off

### **MS-H-Pro+ -** Ceramic 5" Round Hotplate/Stirrer with Digital LCD Display

- Backlit LCD displays target and actual temperatures and speed
- Brushless DC motor is maintenance free and explosion-proof
- Digital process timer provides unattended operation and can be set from 1min-99h59min
- Fully closed aluminium alloy casing has a IP protection class of IP42
- •The temperature sensor consists of two independent safety circuits, which switches off heating in case of any over temperature situation
- "HOT" indicator warning to prevent burns, even if switched off

• Stainless steel with ceramic coated hotplate allows immediate heat transfer for quick heat-up times, chemical-resistant and scratch proof



### SPECIFICATION

	MS-H280-PRO	MS7-H550-S	MS7-H550-PRO	MS-H-PRO+
Part number	1200464	1194249	1191813	1200459
Max. stirring quantity (H <sub>2</sub> o)	3	10	20	20
Speed range [rpm]	100-1500	0-1500	100-1500	100-1500
Heating temperature range °C	Room temp - 280°C	Room temp - 550°C	Room temp - 550°C	Room temp - 340°C
Temperature increments	1	5	1	1
Work plate material	Ceramic coated SS	Glass ceramic	Glass ceramic	Ceramic coated SS
Speed display	LED	Scale	LCD	LCD
Heating display	LED	LED	LCD	LCD
Motor Type	DC	Shaded pole	Brushless DC	Brushless DC
Motor rating input [W]	5	15	18	18
Voltage [VAC]	200-240	200-240	200-240	200-240
Power [W]	515	1030	1050	550





# MAGNETIC HOTPLATE STIRRERS ACCESSORIES

A selection of inserts for holding different sized tubes and vials for direct heating of a variety of vessels using your Camlab Choice hotplate.

Quarter colour pies to take vessels with a volume range from 4mL to 16mL which ensure uniform heating distribution on the vessel and have excellent resistance to chemicals. The colour pies are easy to clean and safe to use. 4 quarter pies are combined with a ring to make a complete set.





1189932	Blue Carrying Plate suitable for MS-H-Pro & MS-H280-Pro Hotplate Stirrers
1189933	Fixed ring suitable for MS-H-Pro & MS-H280-Pro Hotplate Stirrers
1189934	Quarter Pie with 11 Holes For 4ml Reaction Vessels Ø15.2mm Depth 20mm for MS* Hotplate Stirrers
1189935	Quarter Pie with 4 holes For 20ml Reaction Vessels Ø28mm Depth 24mm For MS* Hotplate Stirrers
1189936	Quarter Pie with 4 Holes For 30ml Reaction vessel Ø28mm Depth 30mm For MS* Hotplate Stirrers
1189937	Quarter Pie with 4 Holes For 40ml Reaction Vessels Ø28mm Depth 43mm For MS* Hotplate Stirrers
1189938	Quarter Pie with 6 Holes For 8ml Reaction Vessels Ø17.8mm 43mm Depth For MS* Hotplate Stirrers
1189939	Quarter Pie with 4 Holes For 16ml Reaction Vessels Ø21.6mm 31.7mm Depth For MS* Hotplate Stirrers
1189948	F101 Protective Cover For MS Hotplate Stirrers
1189944	PT1000A 230mm temperature sensor
1189945	PT1000 100mm temperature sensor
1189946	Support clamp for temperature sensor
1200336	Support clamp of PT1000 for MS0H280-Pro only



# ORBITAL SHAKERS

Compact, orbital shaker with ideal swivel motion, for maximum shaking weights of 2.5kg (1189972) and 7.5kg (1189973)

Features:

- Independent LCD display for speed and time adjustment
- Speed and timer and operating mode can be viewed simultaneously
- Wide range of accessory platforms makes it possible to use almost all shapes and sizes of vessels
- Electronic time switching clock controls time or continuous operation mode
- Brushless DC motor, long service life and maintenance free
- Over speed detection and protection
- Multi-voltage: 100-240
- Power: 30W
- Permissible ambient temperature: 5-40°C
- Relative humidity: 80%
- Protection class acc. DIN EN60529: IP21

• PC control via RS232 interface, the special Shaker PC software can realize the setting of instrument parameters on the PC and the display of working curves red-time

Note: Roller attachments must be purchased separately

Dimensions: SX18o-Pro: (DxWxH) 340x300x100mm SK330-Pro: (DxWxH) 420x370x100mm

### SPECIFICATION

	SK-O180 PRO	SK-0330PRO
Part number	1189972	1189973
Shaking motion	Orbital	Orbital
Orbital Diameter	4mm	10MM
Max. load capacity (inc platform)	2.5kg	7.5kg
Speed range	100-800rpm	100-500rpm

# ORDERING INFORMATION

1189972	SK-O180 Pro Compact Orbital Digital Shaker (2.5Kg)
1189973	SK-O330-Pro Orbital Digital Shaker (7.5 Kg)
1191820	SK 180.1 Universal attachment with 3 roller bars for 2.5kg shakers
1191821	SK 330.1 Universal attachment with 4 roller bars for 7.5kg shakers
1196839	SK330.5 Dish Platform Attachment With Non-Slip Mat and 8 Fixing Strings
	suitable for 1189973

# **ROCKING SHAKERS**

Rocking shaker with ideal shaking motion, for a maximum weight of 10kg

Features:

- Smooth see-saw rocking action with 9° angle
- Load(with platform) up to 10kg
- Speed range of 10-70rpm
- Wide range of optional accessory platforms available make it possible to use
- almost all shapes and sizes of vessels
- LCD display
- Timer range 1-1199 minutes
- Electronic adjustment of speed and built-in timer
- Speed and timer can be viewed simultaneously
- Timing and continuous operation modes
- Dimensions: (DxWxH) 410x360x200mm

Note: bar attachment must be purchased separately

### ORDERING INFORMATION

1190942	SK-R330-Pro Digital LCD Rocking Shaker, see-saw, angle 9°
1191821	SK 330.1 Universal attachment with 4 roller bars
1196839	SK330.5 Dish Platform Attachment With Non-Slip Mat and 8 Fixing Strings



SK-R330-Pro shaker with non-slip mat and fixing strings attachment 1196839



SK-O180 Pro orbital shaker with 3 roller bar attachment 1191820

Description Description Description

<sup>∂</sup>www.camlab.co.uk



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# ROCKING SHAKERS

Classic rocking shaker for a maximum shaking weight (with platform) of 3kg

Features:

- Tilt Angle: 7°
- Rocking motion: See-saw rocking
- Speed range: o-8orpm
- Max load capacity (with platform): 3kg
- Compact space-saving design fits easily in the incubator and cryogenic box
- Aluminium-alloyed platform provides strong bearing capability, with non-slip mat holds vessels prevent slipping
- Continuous operation, speed range of o-80 rpm
- Timer: No
- Dimensions WxDxH: 270x330x130mm
- Protection class acc. to DIN EN60529

Note: if required bar attachment must be purchased separately

### ORDERING INFORMATION

1196836	SK-R1807-E Classic Rocking Shaker With Non-Slip Mat 7° Angle
1191820	SK 180.1 Universal attachment with 3 roller bars
1191821	SK 330.1 Universal attachment with 4 roller bars
1196839	SK330.5 Dish Platform Attachment With Non-Slip Mat and 8 Fixing Strings



# 3D SHAKERS

Compact 3D shaker with ideal shaking motion, for a maximum shaking weight of  $_{3kg}$ 

### Features:

- Tilt angle: 7°
- Rocking motion: 3D orbital
- Max load: 3kg
- Speed range: 10-80rpm
- Compact space-saving design fits easily in the incubator and cryogenic boxes
- Aluminium-alloyed platform provides strong bearing capability with non-slip mat
- holds vessels prevent slipping
- Continuous operation, speed range of o-80 rpm
- Multi-voltage: 100-240
- Continuous operation
- Dimensions WxDxH: 270x330x130mm
- Permissible ambient temperature: 5-40°C
- Protection class ac. to DIN EN60529: IP21

Note: if required bar attachment must be purchased separately

### ORDERING INFORMATION

1196837	SK-D1807-E Classic 3D Shaker With Non-Slip Mat 7° Angle
1191820	SK 180.1 Universal attachment with 3 roller bars
1191821	SK 330.1 Universal attachment with 4 roller bars
1196839	SK330.5 Dish Platform Attachment With Non-Slip Mat and 8 Fixing Strings

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# CAMLAB CHOICE

# MX-M MICROPLATE MIXER

The Mixer's speed and orbit offer true vortexing action in each well of the microplate for complete and uniform mixing.

### Features:

- Max shaking weight: 0.5kg
- Shaking movement: orbital
- Speed range for single microplate: 0-1500rpm
- Speed range for double microplate: o-1000rpm
- Orbital diameter: 4.5mm
- Maximum humidity: 80%
- Weight of unit: 2.27kg
- Continuous operation
- External rotor brushless motor reduces operating noises and increases motor life
- increases motor life
- Voltage: 100-240
- Dimensions: (WxDxH) 260x150x80mm
- Protection class according to DIN EN60529: IP21

See adjacent page for adapters and tube accessories

### ORDERING INFORMATION

1189974	Camlab Choice MX-M Microplate Mixer with Microplate Clamp
1189981	Single Microplate Clamp for use with MX-M Microplate Mixer
1189982	Double Microplate Clamp for use with MX-M Microplate Mixer

# MX-S VORTEX MIXER



MX-M Microplate Mixer suppled as standard a single microplate clamp



Double microplate clamp to hold two microplates 1189982



MX-M with universal top plate with 1189978 tube adapter





MX-S vortex mixer with 1189985 tube adapter holding rod

MX-S vortex mixer is a simple laboratory mixer designed for working with a range of tube sizes and samples.

Features:

- Wide speed range: 0-2500rpm, stepless speed regulation of motor
- Supplied with 1x 1189984 standard top for <Ø30mm tubes
- Can be used for various shaking application with optional adapters for Eppendorf and other microcentrifuge tubes
- Adapted securely clocked onto appliance in any position
- Sturdy cast casting
- Specially designed silicone feet and steel base for excellent vibration
- Power: 60W
- Speed Range: 0-2500rpm
- Orbital diameter: 4mm
- Weight: 3.5kg
- Permissible ambient temperature 5-40°C

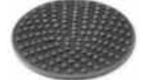
See adjacent page for adapters and tube accessories

### ORDERING INFORMATION

1189983	MX-S Camlab Choice Vortex Mixer 0-2500rpm With UK plug
1189984	Standard top for <Ø30mm tubes and small vessels
1189985	Tube holding rod used with tube adapters
1189992	Platform pad for <Ø99mm tubes and small vessels



1189985 - holding rod for use with any of the tube adapters on the adjacent page



1189992

Description Description Description

# MICROPLATE AND VORTEX MIXER ACCESSORIES



1189975 - Universal top plate (round) required to fix below tube adapters with MX-M Microplate Mixer



1189986 - Universal top plate (round) required to fix below tube adapters to used with MX-S Vortex Mixer





1189976



1189977



1189978



1189979



1189980

### ORDERING INFORMATION

1189976Tube adapter for 48 holes test tubes Ø6mm (0.5ml)1189977Tube adapter for 18 holes test tubes Ø10mm (1.5-2.0ml)1189978Tube adapter for 12 holes test tubes Ø12mm (2-7ml)1189979Tube adapter for 8 holes test tubes Ø16mm (4-15ml)	1189975	Universal top plate (round) used with MX-M Microplate Mixer
1189977Tube adapter for 18 holes test tubes Ø10mm (1.5-2.0ml)1189978Tube adapter for 12 holes test tubes Ø12mm (2-7ml)1189979Tube adapter for 8 holes test tubes Ø16mm (4-15ml)	1189986	Universal Top Plate Attachment for use with MX-S Mixers tube adapters
1189978         Tube adapter for 12 holes test tubes Ø12mm (2-7ml)           1189979         Tube adapter for 8 holes test tubes Ø16mm (4-15ml)	1189976	Tube adapter for 48 holes test tubes Ø6mm (0.5ml)
1189979 Tube adapter for 8 holes test tubes Ø16mm (4-15ml)	1189977	Tube adapter for 18 holes test tubes Ø10mm (1.5-2.0ml)
	1189978	Tube adapter for 12 holes test tubes Ø12mm (2-7ml)
1189980 Tube adapter for 8 holes test tubes Ø20mm (20ml)	1189979	Tube adapter for 8 holes test tubes Ø16mm (4-15ml)
	1189980	Tube adapter for 8 holes test tubes Ø20mm (20ml)



# MX-T6 ROLLER MIXER

When the samples are placed between the rollers in tubes or bottles, they are gently rolled. A rocking action is also applied whereby the rollers are raised and lowered at one end during rolling. This increases the effectiveness of the mixing.

### Features:

- Speed range o-70rpm
- Amplitude: 24mm
- Max load capacity: 4kg
- 6 rollers design with a small footprint and easy cleaning
- Roller length: 280mm
- Speed display: scale
- Electronic adjustment of speed and time
- Designed for continuous operation
- Voltage: 100-240
- DC motor

Applications: Mixing of blood samples, viscous samples, where minimum aeration is required or for aiding de-frosting of samples.

### ORDERING INFORMATION

1191099 MX-T6-S Classic Roller Mixer with 6 Rollers



# MX-RL-PRO ROTATOR



With end-over-end action, the MX-RL-Pro rotator gives gentle but effective mixing. Supplied with a rotisserie accessory for 16 x 50ml tubes.

### Features:

- Adjustable speed between 10 and 70rpm
- Adjustable mixing angle between 0 and 90°
- LCD displays speed and time adjustment
- Time setting range: 1-1199mins
- Continuous/times operation
- Electronic adjustment of speed and timer
- For use with a variety of accessories
- Dimensions DxWxH: 220x510x260mm
- Protection class acc. to DIN EN60529: IP21

### ORDERING INFORMATION

1190943 MX-RL-Pro Digital LCD Rotator with Rotisserie Accessory For Tubes with 23mm Diameter

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# **OVERHEAD STIRRERS**

Highly reliable, long continuous service and outstanding performance with speed range from 50 to 22000rpm

### OS20-S

• LED displays actual speed

• Brushless DC motor drive, maintenance free and explosion proof • Overload protection - motor automatically stops in case of overload

### OS20-Pro/ OS40-Pro

• LCD Display for precise monitoring of set and actual speeds • Torque trend display for real-time information on viscosity changes

• Protection - safety circuits installed ensures automatic cut-off in an anti-stall or overload conditions

• Gradual acceleration prevents spills and splashing media

• Provides a constant speed even with changes in viscosities of the sample

RS232 interface - PC can control and document operation values via RS232 interface and 3rd party software

### **SPECIFICATION**

	OS20-S	OS20-PRO	OS40-PRO
Part number	1189960	1189959	1189957
Max. stirring quantity (H <sub>2</sub> o)	20	20	40
Speed range [rpm]	50-2200	50-2200	50-2200
Speed display accuracy [rpm]	-	±3	±3
Speed display	LED	LCD	LCD
Max. torque [Ncm]	40	40	60
Viscosity mx [mPas]	50000	10000	10000
Motor input rating [W]	50	50	100
Voltage [VAC]	100-240	100-240	100-240
Power	70	70	130



OS40-Pro Overhead stirrer with universal stand Universal stand (WxD: 21x31cm) including support holder (H: 78cm) and fixing device Part number - 1189961



	DESCRIPTION	MATERIAL	SHAFT LENGTH [CM]	STIRRER DIAMETER [CM]
1189962	Crossed stirrer	316L Stainless steel	40	5.0
1189963	Straight stirrer	316L Stainless steel	40	6.0
1189964	Blade stirrer	316L Stainless steel	40	6.8
1189965	Centrifugal stirrer	316L Stainless steel	40	9.0
1189966	Crossed Stirrer	PTFE coated	35	6.5
1189967	Straight stirrer	PTFE coated	35	7.0
1189968	Blade stirrer	PTFE coated	35	6.8
1189969	Centrifugal stirrer	PTFE coated	35	8.5
1109909	centinugai stirrei	FILE COLLEG	>>	0.5



# **RE100-PRO ROTARY EVAPORATOR SET**

With an easy to read, large digital LCD screen this rotary evaporator displays all key parameters for monitoring your evaporations.

• Supplied with a large 5L water or oil bath, with heating up to 180°C possible. The precise temperature control and adjustable safety circuit make the bath both accurate and safe.

• The patented condenser has a large cooling surface of 1,500 cm2 making cooling fast and efficient.

• Motorized lifting of the flask with quick-action automatic release to the top position in case of a power failure ensures safe operation.

- The evaporator has adjustable final position recognition to protect the operator and samples against breakage.
- Speed can be set from 20 to 280 rpm

• Supplied with a full glassware set, 5L water or oil bath, mains power supply and instruction manual.

NB no vacuum pump is included, this should be purchased separately if required - email sales@camlab.co.uk for more info

### ORDERING INFORMATION

1196832	RE100-Pro Rotary Evaporator with Set of Vertical Glassware (1L)



1196832

# VACUUM FILTRATION APPARATUS KIT



199900

Complete kit with everything you need to perform vacuum filtrations, also known as Buchner filtrations. Simply add 7cm diameter filter papers to suit your application.

Available with a vacuum pump for a complete solution, or without the pump if you already have a vacuum source in your lab.

NB - the pump supplied is suited to aqueous samples only, if you are filtering organic solvents or corrosive liquids please use the kit without pump and separately choose a chemical duty pump from our range.

### Kit Includes

1x vacuum pump (ONLY 1199900) 1x vacuum filtration connection kit, with 1.5m of 6mm ID silicone tubing, 1.5mm of 8mm ID silicone tubing and an inline filter to

connect the two

1x 250ml Pyrex Buchner flask

1x set of filter cones to connect flask and funnel

1x porcelain Buchner funnel for 7cm diameter filter papers 1x retort stand to hold flask in place (1x base, 1x rod, 1x bosshead, 1x clamp)

### ORDERING INFORMATION

1199900	Vacuum Filtration Apparatus Kit - including pump, just add 7cm filter papers
1199901	Vacuum Filtration Apparatus Kit - without pump, add vacuum source and 7cm filter papers



## DISPOSABLE TRANSFER PIPETTES

1ml and 3ml graduated transfer pipettes. Made from flexible polyethylene. Available sterile and non-sterile.

- For general purpose use
- 100% inert for accurate sampling
- Transparent wall permits easy viewing of pipette contents
- Clearly visible with either clear or turbid samples



#### ORDERING INFORMATION

1192303	Disposable Transfer Pipettes Total Capacity 6.2ml Graduated to 1ml Pack of 500	0.25ml intervals
1192304	Disposable Transfer Pipettes Total Capacity 7.5ml Graduated to 3ml Pack of 500	0.25ml intervals
1192305	Sterile Disposable Transfer Pipettes Total Capacity 6.2ml Graduated to 1ml Ind. Wrapped Pack of 500	0.25ml intervals
1192306	Sterile Disposable Transfer Pipettes Total Capacity 7.5ml Graduated to 3ml Ind. Wrapped Pack of 500	0.5ml intervals

## MID VOLUME PIPETTE TIPS

Mid volume pipette tips

- Polypropylene
- RNase & DNase Free
- Autoclavable
- Available sterile and non-sterile
- Universal fit to most pipettes
- 100% inert
- Fast and effective analyte transport





## ORDERING INFORMATION

1171492	Micro Pipette Tips 10µl Non Sterile Natural Bagged Pack of 1000
1171493	Micro Pipette Tips 200µl Non Sterile Yellow Universal Fit Bagged Pack of 1000
11171493	Mid Volume Pipette Tips 1000µl Non Sterile Blue Universal Fit Bagged Pack of 1000
1171495	Micro Pipette Tips 10µl Sterile Natural Racked Pack of 960 - 10 Racks Per Pack x 96 Tips Per Rack
1171496	Micro Pipette Tips 200µl Sterile Yellow Racked Pack of 960 - 10 Racks Per Pack x 96 Tips Per Rack
1171497	Mid Volume Pipette Tip 1000µl Sterile Blue Racked Pack of 1000 - 10 Racks Per Pack 100 Tips Per Rack

## EXTENDED LENGTH 1ML PIPETTE TIPS



## Extended Length 1ml Pipette tips:

- Total capacity is 1250
- Extended tip allows user to easily pipette into deep wells or test tubes
- Special design reduces reagent waste
- Fast and effective transfer of samples
- Constructed of high quality clear polypropylene
- 100% Inert RNase and DNase free

## ORDERING INFORMATION

1200232 Mid Volume Extended Length 1250µl Non Sterile Natural Pipette Tips Bagged Pack of 1000

sales@camlab.co.uk



## CHAMP 1 LAB CHAIR

The Champ 1 is an Economy standard height lab chair with no compromise on quality.

- Seat height adjustable from 440-620 mm
- Polished aluminium castor base
- Provided with a choice of fabrics



1198306 Champ 1 Lab chair with castors and integrated polyurethane seat -



1198303 Champ 1 Lab chair with castors and synthetic leather seat -

## CHAMP 2 LAB CHAIR

Economy range of tall Lab chairs with no compromise on quality.

- Seat height adjustable from 580-850 mm
- Polished aluminium castor base
- Choose from sliders, sliders with footring or stop-go castors
- Provided with a choice of fabrics
- Supplied flat packed

1198307 Champ 2 Lab Chair with footring sliders and integrated polyurethane seat



1198304 Champ 2 Lab Chair with sliders and synthetic leather seat



1198308 Champ 2 Lab Chair with stop-go castors footring and polyurethane seat



1198305 Champ 2 Lab Chair with stop-go castors footring and synthetic leather seat



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# HYAD LAB STOOLS

Economy range of Lab stools with no compromise on quality. Provided with a choice of fabrics, footrings with standard or stopgo castors for ultimate safety.

- Base diameter 640mm
- Polished aluminium castor base
- Soft and comfortable upholstery provides a comfortable feel
- Ideal for use in production and laboratory
- Seat height can be adapted to nearly 95% of all body sizes, the cover protects the gas spring from dust and dirt
- Height adjustment can be operated comfortable and easy in sitting position
- High stability and longevity

Hyad 1 - Seat Height 460-630mm Hyad 2 - Seat Height 570-850mm



1198309 Hyad 1 Lab Stool with castors and synthetic leather seat



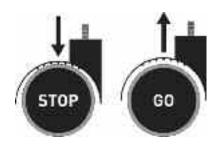
1198310 Hyad 1 Lab Stool with castors and polyurethane seat



1198311 Hyad 2 High Lab Stool with footring stopgo castors and synthetic leather seat



1198312 Hyad 2 High Lab Stool with footring stop-go castors and polyurethane seat



Stop-go castors

1198309	Hyad 1 Lab Stool with castors and synthetic leather seat
1198310	Hyad 1 Lab Stool with castors and polyurethane seat
1198311	Hyad 2 High Lab Stool with footring stop-go castors and synthetic leather seat
1198312	Hyad 2 High Lab Stool with footring stop-go castors and polyurethane seat
1198303	Champ 1 Lab Chair with castors and synthetic leather seat
1198306	Champ 1 Lab Chair with castors and integrated polyurethane seat
1198304	Champ 2 Lab Chair with sliders and synthetic leather seat
1198307	Champ 2 Lab Chair with footring sliders and integrated polyurethane seat
1199791	Champ 2 Lab Chair with footring sliders and integrated blue polyurethane seat
1198308	Champ 2 Lab Chair with stop-go castors footring and polyurethane seat
1198305	Champ 2 Lab Chair with stop-go castors footring and synthetic leather seat



## NITRILE GLOVES

#### Blue Nitrile Gloves Powder Free - Packs of 100

- Single use nitrile gloves
- Powder free
- Nitrile gloves are 3 three times stronger and puncture resistant than natural rubber gloves
- Have a lower resistance to friction, making them easier to put on and take off your hands
- Do not contain any natural rubber latex, so they can be used by anyone with latex allergies
- Gives protection against: Oils, greases, aliphatic chemicals, xylene, perchloroethylene, trichloroethane; fair vs. toluene



## VINYL GLOVES

#### Vinyl Gloves Powder Free - Packs of 100

- Single use vinyl gloves
- Non-sterile
- Powder free
- Latex free ideal for sensitive skin
- Ideal for the following applications: Medical/vet/dental, food manufacturing
- and preparation, local authority, laboratory and pharmaceutical, janitorial, hair and beauty



## LATEX GLOVES

#### Latex Gloves Powder Free - Packs of 100

- Single use latex gloves
- Non-sterile
- Powder Free
- Good all round glove for everyday tasks that require a high degree of feel and sensitivity
- Good overall strength, generally favoured for their tactile properties and resistance to a wide range of chemical solutions



1197716	Blue Nitrile Gloves Powder Free - Size Small	Pack of 100
1197717	Blue Nitrile Gloves Powder Free - Size Medium	Pack of 100
1197718	Blue Nitrile Gloves Powder Free - Size Large	Pack of 100
1197719	Blue Nitrile Gloves Powder Free - Size Extra Large	Pack of 100
1197721	Vinyl Gloves Powder Free - Size Small	Pack of 100
1197723	Vinyl Gloves Powder Free - Size Medium	Pack of 100
1197724	Vinyl Gloves Powder Free - Size Large	Pack of 100
1197725	Vinyl Gloves Powder Free - Size Extra Large	Pack of 100
1197712	Latex Gloves Powder Free - Size Small	Pack of 100
1197713	Latex Gloves Powder Free - Size Medium	Pack of 100
1197714	Latex Gloves Powder Free - Size Large	Pack of 100
1197713	Latex Gloves Powder Free - Extra Large	Pack of 100





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# HEAVY DUTY WIDE MOUTH HDPE BOTTLES

Heavy duty Wide Mouth HDPE Bottles.

- These popular wide mouth bottles are made of High Density Polyethylene
- They are rigid and non collapsible in construction
- The screw caps have an EPE ring insert to make a tight seal
- Neck bore 48mm

## ORDERING INFORMATION

1141475	300ml Bottle Wide Mouth HDPE Heavy Duty
1141477	700ml Bottle Wide Mouth HDPE Heavy Duty
1141480	1250ml Bottle Wide Mouth HDPE Heavy Duty



## TRI-CORNERED BEAKERS

A range of great value tri-corner polypropylene beakers available in a range of sizes from 5 oml up to 1L.

- Autoclavable
- Moulded graduations on the beakers side
- Three dripless pouring spouts
- Can be autoclaved and re-used or used as a disposable beaker
- Good impact strength

## ORDERING INFORMATION

1171498	Tri-corner beaker 50ml	Pack of 25
1171499	Tri-corner beaker 100ml	Pack of 25
1171500	Tri-corner beaker 250ml	Pack of 25
1171501	Tri-corner beaker 400ml	Pack of 25
1171502	Tri-corner beaker 800ml	Pack of 25
1171503	Tri-corner beaker 1000ml	Pack of 25



Camlab 50ml universal centrifuge tubes are manufactured from specially selected polypropylene to offer high-clarity, chemical resistibility and durability.



- Tube height ~ 115mm, Lid diameter 35.5mm
- Conical or free-standing bases available
- Fitted leak-proof screw caps with sealing ring
- Suitable for most brands of centrifuge
- Easy to read printed black graduations are accurate to ±2% in 2.5ml increments
- Large frosted writing area
- Graduations and writing areas are chloroform-resistant Suitable for speeds up to 12000g (conical base) / 6000g •
- (free-standing base) Autoclavable at 121°c and freezable to -80°c
- Racked tubes are packaged in fully recyclable chipboard racks
- Bagged tubes are packaged in durable and re-sealable bags.
- Inner packaging is individually labelled for lot-to-lot traceability
- Sterile tubes are Gamma Irradiated RNase free, DNasefree, DNA-free, and Non-pyrogenic (where stated)

## ORDERING INFORMATION

1171672	50ml PP Centrifuge Tube Conical Base Sterile DNAse/RNAse
	Free Resealable Bags of 25 (Case of 500)



Non Sterile bulk packed 15ml and soml centrifuge tubes in packs of 500 for general use, made from high quality polypropylene.

15ml and 50ml centrifuge tubes in



packs of 500 (bulk) for general use, made from high quality polypropylene

Conical Base

• Flat screw cap for easy marking and referencing from the top

## ORDERING INFORMATION

1129601	50ml Centrifuge Tube Non sterile - Bulk Pack of 500
1129600	15ml Flat Top Cap Centrifuge Tube - Bulk Pack of 500 (boxed 50 tubes per bag)

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## CARDBOARD CRYO BOXES

Cardboard Cryoboxes for economical storage of your cryogenic samples available in 81 or 100 places, multiple size options.

- Low cost and low weight reduces freight costs
- Temperature resistant down to liquid nitrogen
- Boxes are available in either superior white water repellant coating or water resistant plastic laminate coating
- Large variety of sizes from standard cryo tubes up to taller 5ml tubes (5ml tubes will fit in 3inch tall boxes)
- Removable grid if larger containers are required for storage
- Temperature Range: -196ºC to 121ºC
- Writing area on lid

2 inch height boxes: WxDxH: 133x133x52mm 3 inch height boxes: WxDxH: 133x133x73.5mm

## ORDERING INFORMATION

1171506	Cryo box 81 place cardboard superior white box with grid 2 inches	Pack of 5
1171507	Cryo box 100 place cardboard superior white box with grid 2 inches	Pack of 5
1171508	Cryo box 81 place cardboard superior white box with grid 3 inches	Pack of 5
1171509	Cryo box 100 place cardboard superior white box with grid 3 inches	Pack of 5
1171510	Cryo box 81 place laminated cardboard with grid white 2 inch	Pack of 5
1171511	Cryo box 81 place laminated cardboard with grid white 3 inch	Pack of 5
1171512	Cryo box 81 place laminated cardboard with grid white 3 inch	Pack of 5
1171513	Cryo box 100 place laminated cardboard with grid white 3 inch	Pack of 5
1171514	Cryo box 81 place laminated cardboard with grid mixed colours 2 inch	Pack of 5
1171515	Cryo box 81 place laminated cardboard with grid mixed colours 2 inch	Pack of 5

## ORDERING INFORMATION

1198991	16 Place Cardboard Cryo Box for 50ml Tubes with Superior White Coating and Grid Pack of 5
1198990	36 Place Cardboard Cryo Box for 15ml Tubes with Superior White Coating and Grid Pack of 5





# HINGED CRYO BOXES

A range of 81 and 100 place cardboard microtube/cryovial storage boxes with hinged lids and removable plastic PP dividers. The lid, bottom and four sides feature alphanumeric identifications.

- Superior water resistant ID-Colour coated cardboard gives improved durability
- Can be frozen and thawed repeatedly
- Supplied in 5 shades: White, Red, Blue, Green & Yellow
- Great for upright or chest freezers
- Lid, bottom and four sides feature alphanumeric identifications for fast, easy,
- and error-free identification of individual samples
- Holds 1.5/2.oml microtubes and standard 2.oml cryovials
- Temperature range: -86°C—120°C

## ORDERING INFORMATION

	DIMENSIONS	HEIGHT	WELL	COLOUR	РАСК
1208271	133X133X52MM	1 inch	100-well	Assorted; blue, yellow, green, pink, white	Pack of 5
1190988	133X133X52MM	2 inch	81-well	Assorted; blue, yellow, green, pink, white	Pack of 5
1208273	133X133X53mm	2 inch	100-well	Blue	Pack of 5
1208274	133X133X52MM	2 inch	81-well	Assorted; blue, yellow, green, pink, white	Pack of 5
1208275	133X133X95mm	3.75inch	81-well	Assorted; blue, yellow, green, pink, white	Pack of 5



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# CELL STRAINERS

A range of sterile cell strainers, available in three colour coded nylon mesh sizes for optimal performance in a variety of applications Simple quick devices for isolation of primary cells for single cell suspension from tissues. Protects valuable instrumentation such as flow cytometry and cell sorting instruments. Removes clumps and tissue debris from suspensions of cells prior to analysis

- Nylon mesh
- Compatible with most 50ml centrifuge tubes
- Polypropylene frame with moulded handling tab
- Gamma Irradiated
- Individually Wrapped
- Packs of 50





## ORDERING INFORMATION

1173458	Cell Strainers 40µm Sterile, Nylon Mesh, PP Frame, Purple pack of 50
1173459	Cell Strainers 70µm Sterile, Nylon Mesh, PP Frame, Orange, pack of 50
1173460	Cell Strainers 100µm Sterile, Nylon Mesh, PP Frame, Green, pack of 50

## STERILE CELL CULTURE FLASKS

Sterile cell culture flasks made of high quality medical grade polystyrene

- Available flask sizes include surface areas of 25 cm2, 75 cm2, or 175 cm2
- Plug cap and filter cap options available for all flask sizes
- Plug caps completely isolate the culture from the outside environment
- Filter caps prevent cross-contamination while meeting the requirements for gas exchange
- Short, wide, angled neck design for easy access
- Electron beam sterilized
- Non-pyrogenic, non-cytotoxic
- DNase & RNase free, human DNA free

## ORDERING INFORMATION

Sterile 7ml Cell Culture Flasks with Filter Cap	Pack of 5
Sterile 25ml Cell Culture Flasks with Filter Cap	Pack of 5
Sterile 50ml Cell Culture Flasks with Filter Cap	Pack of 5
Sterile 7ml Cell Culture Flasks with Plug Cap	Pack of 5
Sterile 25ml Cell Culture Flasks with Plug Cap	Pack of 5
Sterile 50ml Cell Culture Flasks with Plug Cap	Pack of 5
	Sterile 25ml Cell Culture Flasks with Filter Cap Sterile 50ml Cell Culture Flasks with Filter Cap Sterile 7ml Cell Culture Flasks with Plug Cap Sterile 25ml Cell Culture Flasks with Plug Cap

## STERILE CELL CULTURE SLIDES

Designed for various cell-based experiments and are also useful for virus, toxicity tests and immunocytological experiments. Cell Culture Slides provide removable chamber.

- Sterile
- Bottom material: Glass, Chamber material: PS, Holder material: PP
- Chamber colour: Clear
- Easy open flip for chamber & slide disassembly
- No chemical adhesives used
- Designed to prevent cross contamination
- Alphanumeric labelling
- Non-pyrogenic, non-cytotoxic
- DNase & RNase free, human DNA free

1208117	Sterile 7ml Cell Culture Flasks with Filter Cap	Pack of 5
1208119	Sterile 25ml Cell Culture Flasks with Filter Cap	Pack of 5
1208121	Sterile 50ml Cell Culture Flasks with Filter Cap	Pack of 5
1208118	Sterile 7ml Cell Culture Flasks with Plug Cap	Pack of 5







## LOOPS

High impact polystyrene loops and needles are smooth and flexible to facilitate uniform and smooth inoculations. The needles are straight and are suitable for removal of single colonies. The loops can also be used as needles Packed sterile in safe tamper proof zip sealed resealable bags



- 25 loops per bag
- Free from lubricants, oils and electrostatic charge
- Colour coded sizes

#### ORDERING INFORMATION

1171523	1µL Blue - Case of 1000 packed in inner 25's
1171524	10 $\mu$ L Orange - Case of 1000 packed in inner 25's
1171525	Plain tip, Yellow - Case of 1000 packed in inner 25's

## STERILE PETRI DISHES

Camlab 90-150mm Petri dishes, Sterile.

- Manufactured from virgin polystyrene
- Gamma irradiated
- Certified non-pyrogenic
- Uniform wall thickness ensures distortion-free bottom
- Dish surface is smooth and free from striation to maximize usable area for growth

#### ORDERING INFORMATION

1171736	90mm Petri Dishes, sterile - Pack of 500
1171737	150mm Petri Dishes, sterile vented - Pack of 120

## SPREADERS



Ideal for the even inoculation of bacterial cultures Smooth spreading surface with slight upward angle to reduce the risk of damaging the agar surface.

L-shape allows application on the entire petri dish surface recognition.

- Polystyrene
- Sterile
- Packed in zip-seal bags
- Colour coded for easy recognition
- Disposable

#### ORDERING INFORMATION

1171526 Cell spreader Orange, individually wrapped

## CELL SCRAPERS AND LIFTERS

Non-pyrogenic cell scrapers and lifters made from polyethylene suitable for use with a variety of cell culture vessels, dishes and cell culture clusters for quick removal of cell layers.



- Blade Length: 2.0cm; Handle Length: 16cm
- Disposable lifters quickly remove cell layers
- The one-piece design and chiseled blade provide improved control while minimizing damage during the cell removal process
- Gamma radiation sterilized and individually wrapped

#### Scraper Features

- Available in 180mm and 250mm handle sizes
- The uniquely designed handle and blade reduce cell damage during the harvesting process
- Pivoting blade makes precise cutting and scraping movements
- Pre-sterilized and individually wrapped in peel-open packaging

1173211	Cell Lifter, Sterile, 180mm Length, Blade Length 20mm, Pack of 100
1173209	Cell Scraper, Sterile, 180mm Length, Blade Length 18mm, Pack of 100
1173210	Cell Scraper, Sterile, 250mm Length, Blade Length 18mm, Pack of 100

## 2ML CRYOGENIC VIALS

Self standing, sterile cryotubes with external thread cap in green - supplied in bags of 25 with 20 packs in each supplied unit.



#### ORDERING INFORMATION

1201046	2.0ml cryogenic vial White caps - Pack of 500
1201047	2.0ml cryogenic vial Red caps - Pack of 500
1201048	2.oml cryogenic vial Blue caps - Pack of 500
1201067	2.oml cryogenic vial Green caps - Pack of 500
1201165	2.0ml cryogenic vial Yellow caps - Pack of 500

## CORK / FOAM LINED SLIDE BOXES

A range of microscope slide boxes, cork or foam lined, for storing standard sized slides.



standard sized slides • Made of strong durable plastic with soft foam lining.

• Designed to store 25 or 100

- This superior design can prevent slide breakage and block dust from contaminating microscope slides.
- Available with cork lining or foam lining
- Assorted colours available

## ORDERING INFORMATION

1171516	25-place foam lining mixed colours Pack of 5
1171517	100-place foam lining mixed colours Pack of 5
1171518	25-place cork lining mixed colours Pack of 5
1171519	100-place cork lining mixed colours Pack of 5

## PIPETTE RESERVOIRS NON STERILE

Disposable pipetting reservoir for Single or Multi-Channel Pipette.

- Capacity 55 ml
- For Single or Multi-Channel Pipette
- PVC
- Non-sterile
- Clear

#### ORDERING INFORMATION

1171504

Pipetting reservoir clear PVC - Pack of 100

## PIPETTE RESERVOIR

Trifill is a reversible pipette reservoir with a single reagent reservoir (50mL) one side and 8 channel reservoirs on the other.

ORDERING INFORMATION

1158217 TriFill pipetting reservoir pack of 10

## 5ML STERILE CRYOVIALS

Self standing, sterile cryogenic vial with external thread cap supplied in bags of 25 with 10 packs in each supplied unit.

- Made of medical grade polypropylene; can be repeatedly frozen and thawed
- External thread vials' caps lack o-rings, which reduces the possibility of contamination
- DNase & RNase free, endotoxin free, foreign DNA free With digital code by Side laser printing, easy for
- information storage Working temperature: stable from -196°C to 121°C
- Suitable for liquid nitrogen freezing
- Available with different colour caps for identification

## ORDERING INFORMATION

1201049	5.oml cryogenic vial blue cap pack of 250
1201050	5.oml cryogenic vial red cap pack of 250
1201051	5.oml cryogenic vial white cap pack of 250
1201068	5.oml cryogenic vial green cap pack of 250
1201166	5.oml cryogenic vial yellow cap pack of 250

## **SLIDE MAILERS**

A range of microscope slide mailers made from durable cardboard, with thumb grooves for easy removal of slides.

- Made of sturdy cardboard to protect slides
- Folding lids to protect samples Safe method of storing and
- transporting microscope 20-Place folder (1171522)
- features an inventory sheet



## ORDERING INFORMATION

1171520	Slide Mailer 1-Place Pack of 100
1171522	Slide Folder 20-Place with Inventory Sheet Pack of 10 in Storage Box

## PIPETTE RESERVOIRS STERILE

Disposable pipette reservoir for Single or Multi-Channel Pipettes.

- Material: polystyrene
- Angled sides and V-shaped bottom permits easy access to solution 3 different sizes available



Can be used with single or multi-channel pipettes

## ORDERING INFORMATION

1201042	Pipetting reservoir, individually wrapped sterile capacity 25ml Pack of 100
1171505	Pipetting reservoir, individually wrapped sterile capacity 55ml Pack of 100
1201043	Pipetting reservoir, individually wrapped sterile capacity 100ml Pack of 50



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# **GLASS WASHERS**

The Camlab CUB range of washing machines incorporate the latest in microprocessor technology. The machines can be programmed to carry out washing, rinsing and drying cycles to meet a wide range of specific or demanding requirements for the decontamination of laboratory glassware.

## CAMLAB CUB 3060 GLASSWASHER





## STANDARD FEATURES

- Washing tank/door in AISI 316L acid-resistant chrome nickel-molybdenum stainless steel.
- Outer panels in AISI 304 stainless steel
- Main wash pump: 400L/min
- 2 Peristaltic pumps for liquid detergent and acid, 2 other pumps are available as options for anti-foam, caustic soda etc
- Separate cold, hot and demineralised water supplies, unpressurised demin will need a PAD boost pump
- Water consumption: 8-10L per phase
- Built-in water softener with automatic selectable regeneration period

#### ELECTRONIC PROGRAMMING

The Camlab CUB range of washing machines incorporate the latest in microprocessor technology. The machines can be programmed to carry out washing, rinsing and drying cycles to meet a wide range of specific or demanding requirements for the decontamination of laboratory glassware.

## DRYING SYSTEM

The washing chamber is heated by electric heating elements, which causes the water to evaporate. Maximum drying temperature is 95°C.

#### **EFFECTIVE WASHING HEIGHTS**

When using basket trays: 280mm clearance on bottom level, 190mm clearance on top level

When using jet racks: 240mm clearance on top level, 460mm with bottom level jet rack only

The CUB 3060 washer is supplied without any trays, spray arms or baskets to allow you to configure your washer to your requirements from the wide range of accessories available.

#### WIDE RANGE OF JET RACKS AND ACCESSORIES

The CUB, EASY and CUB EXTRA can all use the same baskets, minimising spending for core facilities and maximising efficiency (the drying baskets whilst fitting the CUB and EASY will only operate under standard drying conditions, but the jets can still be used to maximum effect). A truly versatile and long lasting range, these washers can be supported by full service back up by factory trained engineers (some restrictions apply and contracts are for UK based machines).

For a basic configuration we recommend using Basic Trolley CS-2 and Spray Trolley CS-1. These will hold a wide variety of supports and baskets. For direct injection washing see our comprehensive range of jet racks. For advice on configuration please call our sales office.

The Camlab CUB range of washing machines incorporates the latest in microprocessor technology. The machines can be programmed to carry out washing, rinsing and drying cycles to meet a wide range of specific or demanding requirements for the decontamination of laboratory glassware.

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# CAMLAB CUB 4090 GLASSWASHER





## STANDARD FEATURES

- Forced hot air drying system with air filter
- Washing at up to 95°C Thermal disinfection
- Large LCD display for easy programming
- Electronic programming with up to 30 programs
- Washing tank/door in AISI 316L acid-resistant chrome nickel-molybdenum stainless steel.
- Outer panels in AISI 304 stainless steel
- Main wash pump: 400L/min
- 2 Peristaltic pumps for liquid detergent and acid, 2 other pumps are available as options for anti-foam, caustic soda etc
- Separate cold, hot and demineralised water supplies, unpressurised demin will require a PAD boost pump
- Water consumption: 8-10L per phase
- Built-in water softener with automatic selectable regeneration period
- Detergent cabinet holds 2x5L or 4x2L reagent bottles.
- Serial port for connection to PC or printer
- Supplied without racks or trolleys

#### CUB EXTRA DRYING SYSTEM

A fan draws in filtered air and directs it into a heating system. Hot filtered air is delivered to the washing tank and channelled into the spigots of the jet rack. The air is directed onto the internal surfaces of the glassware and dries them. Drying takes place at up to 110°C, ensuring efficient drying of internal surfaces and an extremely fast cycle.

#### EFFECTIVE WASHING HEIGHTS

When using basket trays: 280mm clearance on bottom level, 190mm clearance on top level

When using jet racks:

240mm clearance on bottom level, 205mm clearance on top level,460mm clearance with bottom level jet rack only

The CUB EXTRA 4090 washer is supplied without any trays, spray arms or baskets to allow you to configure your washer to your requirements from the wide range of accessories available.

#### WIDE RANGE OF JET RACKS AND ACCESSORIES

The CUB, EASY and CUB EXTRA can all use the same baskets, minimising spending for core facilities and maximising efficiency (the drying baskets whilst fitting the CUB and EASY will only operate under standard drying conditions, but the jets can still be used to maximum effect). A truly versatile and long lasting range, these washers can be supported by full service back up by factory trained engineers (some restrictions apply and contracts are for UK based machines).

For a basic configuration we recommend using Basic Trolley CS-2 and Spray Trolley CS-1. These will hold a wide variety of supports and baskets. For direct injection washing see our comprehensive range of jet racks. For advice on configuration please call our sales office.



# GLASS WASHERS

## MAXI 6090 AND 6090DS GLASSWASHER





A large capacity (365L) washing machine offering washing on three levels, using a combination of jet racks and support trolleys. Available with or without drying system. Incorporates the latest microprocessor technology, with 30 programs for maximum versatility. Programming is via a soft-touch keypad on the front of the instrument.

- Stainless steel wash chamber and exterior
- Easy to read graphic display shows cycle progress, chamber temperature and fault detection
- 20 programs installed as standard. Space for a further 10 operator defined programs
- Separate hot, cold and demineralised water supplies inputs 3/4" BSP
- 4 dosing pumps for liquid detergent, acid neutralizer rinse and two for other additives of your choice.
- Heating to 95° Thermal disinfection
- 2 Drying Options Active thermodynamic drying or Forced HEPA Filtered air
- Electrical door interlock to prevent opening during a run
- Cabinet underneath for 4x5L wash additives e.g. Detergent, anti-foam, caustic soda and acid rinse.
- Serial port RS232 for connection to a printer or PC
- Built-in boiler for pre-heating of demineralised water
- 3 Phase connection 3P+N 415V 50Hz 18KW Max.
- Supplied with a wheeled foot base for easy movement and secure placement

The MAXI 6090 washer is supplied without any trays, spray arms or baskets to allow you to configure your washer to your requirements from the wide range of accessories available.

#### FORCED AIR DRYING SYSTEM - OPTIONAL MODEL 6090DS

Twin blowers with heating elements force hot 99.999% HEPA filtered air into the machine. One blower delivers filtered air into the main washing tank and the other is channelled directly into the spigots of the jet racks to ensure the external AND internal surfaces are completely dried. Drying takes place at up to 110°C, ensuring efficient drying of internal surfaces and an extremely fast cycle.

All glass washers are supplied without racking and accessories. Please contact us for more information.

# **GLASS WASHERS**



## MAXI MEDICAL 6090 4 LEVEL



A large capacity thermal disinfection instrument washer according to EN 15883 offering washing on four levels, using a combination of jet racks and support trolleys. Available with or without drying system. Incorporates the

latest microprocessor technology, with 30 available programs for maximum versatility.

Programming is via the soft-touch keypad.

#### STANDARD FEATURES:

- Pre-heating of demineralised water
- Stainless steel wash chamber and exterior
- •7 programs installed as standard. Option for a further 23 operator defined programs
- Separate hot, cold and purified water supplies
- 4 dosing pumps
- •Heating to 95°
- Display shows cycle progress, chamber temperature and fault detection
- Door safety interlock

## MAXI GW6010 2 LEVEL



The GW6010 high capacity glass washer/disinfector in two model types. The GW6010M single door version and the GW6010 with double door pass through capability.

- Washing up to 95°C antibacterial thermal disinfection
- Capacity up to 5 adjustable levels
- Electronic programming: 20 set programs + 20 free
- programs
- Multi-language TFT colour touch screen on both sides Functioning protected by passwords
- Integrated built-in panel printer (optional)
- USB port for downloading washing cycles log
- Ethernet port for LAN connection (optional) n.
- 2 drop down full glass door Door locked for safety
- High pressure hot air drying system
- High efficency Ecoslim steam condenser (optional)
- Peristaltic pump for liquid detergent and acid
- Level sensor
- Possibility of installing up 2 additional peristaltic pumps
- Detergent cabinet with removable tray for storing up to 3 cans of 5lt and one of 1lt
- Washing chamber made of AISI 316L stainless steel
- External panels made of AISI 304 stainless steel
- External dimensions LxWxH (mm) 650x720x1945
- Internal working dimensions LxWxH (mm) 546x620x690
- Cold water, hot water and demineralized water connections
- Floor drain connection
- Drain pump (optional)
- Electrical connection 3P+N 400V 50Hz 13kW max 60Hz
- version available
- Without racks

## CAMLAB DETERGENTS



#### Struggling to get glass washer detergents, want expert advice and UK stock?

CAMACID and CAMCLEAN are the popular range of detergents from Camlab ideal for the Camlab CUB range of glasswashers. Ideal for routine cleaning of laboratory glassware old available in a range of sizes to suit your laboratory requirements.

#### Suitable for any machine

Both CAMCLEAN and CAMACID can be used in any glass washer, contact us for dosing information. The new range of CAMCLEAN can be used in any machine and can also be used in other cleaning processes such as ultrasonic cleaning, to ensure consistent cleaning across a range of process for your critical materials

ORDERING INFORMATION

#### £25.90 Camacid 5 £11.56 1167323 Camacid 101 1127876 £21.71

sales@camlab.co.ul



# LABELS

## LABELLING SOLUTIONS FOR BOTH CRYOPRESERVATION UNITS AND **ULTRA LOW FREEZERS!**



## Camlab Micryo Dots and Strips

A new range of self-adhesive labels designed specifically for low temperature use. This dedicated range of labels can be used for most applications to temperatures as low as -196°C. They have a strong permanent adhesive (apply at +5°C or more). They can even be used in incubators.

The wide range of sizes allows you to label your whole experiment from microcentrifuge tubes to cryovials, microtitre plates to storage boxes.

Micryo labels can be used on polypropylene, glass, polycarbonate and most metals.

- No need to self-laminate
- Sleeker labels mean your tubes will still fit most storage • systems (including cryocanes) without the label sticking or being torn off
- Easy to see, the bold range of 5 colours mean that you can identify your samples whilst still in the box
- Unique pressure sensitive adhesive formulation for that extra staying power
- A cost effective solution for your low temperature labelling needs

## FOR TUBES

PART NO.	COLOUR	TYPE	QUANTITY
9.5mm dot			
1146435	White	Dispenser Roll	Roll of 1000
1146436	White	Dispenser Roll	Roll of 5000
1146444	5 colours	Dispenser Roll	Roll of 5000*
1158183	White	Sheets of 192 dots	Pack of 20 sheets
1191136	Blue	Dispenser Roll	Roll of 5000
1191137	Yellow	Dispenser Roll	Roll of 5000
1191212	Purple	Dispenser Roll	Roll of 5000
1191213	Red	Dispenser Roll	Roll of 5000
1191135	Green	Dispenser Roll	Roll of 5000

\*(1000 of each Blue, Red, Green, Yellow, Purple)

13mr dot	n			
1158179	White	Sheets of 192 dots	Pack of 20 sheets	
1158141	White	Dispenser Roll	Roll of 1000	
19m do	ot			
1146437	White	Dispenser Roll	Roll of 1000	
146438	White	Dispenser Roll	Roll of 5000	
1158153	White	Sheets of 108 dots	Pack of 20 sheets	

#### FOR MICROTITRE PLATES

	0		
PART NO.	COLOUR	TYPE	QUANTITY
20x6m	nm strip		
1158143	White	Dispenser Roll	Roll of 1000 strips
38x6r	nm strip		
1158165	White	Sheets of 156 labels	Pack of 20 sheets
1158167	5 Colours**	Sheets of 156 labels	Pack of 25 sheets**

#### FOR 0.5ml TUBES

24x13mm strip				
1158159	White	Sheets of 119 labels	Pack of 20 sheets	
1158161	5 Colours**	Sheets of 119 labels	Pack of 25 sheets**	

#### FOR 1.5/2.0ml TUBES

1146443

1158155

Purple

White

33x1	3mm strip		
1146434	White	Dispenser Roll	Roll of 1000 strips
1146439	Blue	Dispenser Roll	Roll of 1000 strips
1146440	Red	Dispenser Roll	Roll of 1000 strips
1146441	Green	Dispenser Roll	Roll of 1000 strips
1146442	Yellow	Dispenser Roll	Roll of 1000 strips

Dispenser Roll

5 Colours\*\* Sheets of 156 labels Pack of 25 sheets\*\* 1158157 \*\*(5 sheets of each Blue, Red, Green, Yellow, Purple)

FOR RACKS CRYOBOXES AND STORAGE BOXES

1158163 White 67 x 25 mm Sheets of 30 labels Pack of 20 sheets 1188125 White 26 x 26 mm Sheets of 80 labels Pack of 80 sheets	e	7x25m	m strip			26 x 26mm	
1199125 White 26 y 26 mm Sheets of 90 labels Dack of 90 sheets	115	8163	White 67 x 25 mm	Sheets of 30 labels	Pack of 20 sheets		
	118	8125	White 26 x 26 mm	Sheets of 80 labels	Pack of 80 sheets		

Sheets of 85 labels Pack of 20 sheets

Roll of 1000 strips

sales@camlab.co.u

# POLYCARBONATE STORAGE BOXES

Camlab's range of cryogenic freezer storage boxes are made in the UK reducing your carbon footprint and are manufactured from 100% virgin materials for utmost quality and durability. They offer perfect support for organised storage, transportation, freezing and autoclaving of your tubes.

- Suitable for use at ultra low temperatures, range from -196°C to 100°C
- Rigid and won't degrade after repeated thaw cycles
- Transparent lids have printed grids for easy identification
- Drain and air vents present in lids to prevent liquid build up from frost
- The boxes are stackable using lid alignment feature
- Boxes can be identified using Micryo Plus labels or Tubee Tech pen

## 100 place polycarbonate storage boxes

Fixed rack for 0.5-2ml tubes, with an option for smaller 10-10.5mm diameter tubes. Transparent lids with printed grids for easy identification Compatible with many LN, Inventory Systems.

Dimensions: 130x130x53mm

1158079	standard tubes box, yellow insert, Pack of 5
1189657	standard tubes box, white insert, Pack of 5
1158287	small tubes box, white insert, Pack of 5

## Clear polycarbonate storage boxes

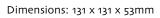
For use with 0.5 to 2ml tubes, lid with printed grids for easy identification.

Available in completely clear for easy visibility of contents, or with a white base and clear lid.

1158300	White base and clear lid, 25 place - Pack of 8
1179596	Clear base and clear lid, 25 place - Pack of 8
1158291	Clear base and clear lid, 81 place - Pack of 5
1180806	Clear base and clear lid, 100 place - Pack of 5

## 81 place polycarbonate storage box with removable rack

For 0.5 to 2ml tubes, up to 12mm in diameter. The lid has printed grid lines for easy identification.



1158290 Yellow, Pack of 5

## 81 place polycarbonate storage box

Fixed rack for 0.5 to 2ml tubes. Frosted writing surface for ease of identification. Compatible with many LN, Inventory Systems

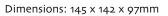
Dimensions: 132 x 132 x 53mm

## ORDERING INFORMATION

REFERENCE	DESCRIPTION	
1158291	Clear, Pack of 5	Mode In UK
1158118	Blue, Pack of 5	• •
1158292	Green, Pack of 5	
1158293	Orange, Pack of 5	
1158116	White, Pack of 5	
1158294	Yellow, Pack of 5	
1158117	Mixed pack (one of each colour)	

## 81 place polycarbonate storage box for tall tubes

For 3 to 5ml taller tubes. For use with cryogenic tubes and vials up to 5ml volume, 93mm in height and 12-13mm in diameter. Hinged lid. Embossed alpha numeric grid on internal section. Frosted writing area for marking or labelling.



## ORDERING INFORMATION

1158295	Blue insert, each	
1158296	Green insert, each	
1158297	Orange insert, each	
1158298	White insert, each	
1158299	Yellow insert, each	

## Cryogenic Storage box without rack

Manufactured in high quality polycarbonate, these storage boxes can be used down to -196°C

Lids have alignment feature with base Stackable for compact storage. Has drain and air vents included. 53mm H x 131mm W x 131mm D

## ORDERING INFORMATION

1158110

Polycarbonate lab towers

Multilevel storage systems, suitable for temperatures to -196°C. Ideal for benchtop use and compatible with most standard cyro boxes. Available with or without 81 place open racks.

Yellow - Pack of 5

REFERENCE	DESCRIPTION	
1158315	5 level labtower	
1158312	5 level with 81 place racks	
1158316	8 level labtower	
1158313	8 level labtower with 81 place racks	
1158317	10 level labtower	
1158314	10 level labtower with 81 place racks	
1158320	labtower carry grips	
1158318	Additional labtower deck - Pack of 16	
1158319	Racks for labtower - 81 place polycarbonate - Pack of 10	
1158321	Clear Polycarbonate lid for labtower racks - Pack of 10	
1158418	Labtower tray - polycarbonate speckled - single	











# PLASTICS

## **50 PLACE STORAGE BOXES**

Manufactured from translucent 100% virgin polypropylene. Use at temperatures from -80°C to 135°C with microtubes or cryogenic vials from 0.1 to 1ml, 10.5mm diameter. Stackable and autoclavable.



Dimensions: 144 x 75 x 35mm

#### ORDERING INFORMATION

1146457	Storage box 50, natural	
1146458	Storage box 50, pink	
1146456	Storage box 50, green	
1146455	Storage box 50, blue	
1146459	Storage box 50, yellow	

## **100 PLACE STORAGE BOXES**

Manufactured in translucent 100% virgin polypropylene. Suitable for use with microtubes, vials and cryogenic vials from 0.5 to 2ml (Maximum tube height is 53.5mm). Temperature range -80°C to 135°C.

Each box has an alpha numeric grid on the lid section for easy reference. Each box is hinged and are stackable.

Dimensions: 140 x 140 x 60mm.

## ORDERING INFORMATION

Box only	With stick on grid	
1146464	1158235	storage box 100, Natural
1146465	1158237	storage box 100, Red lid
1146462	1158231	storage box 100, Green lid
1146460	1158091	storage box 100, Blue lid
1146466	1158090	storage box 100, Yellow lid
1146461		storage box 100, black
1158226		storage box 100, neon green
1158228		storage box 100, neon pink
1158227		storage box 100, neon orange
1158229		storage box 100, neon yellow
1181085		replacement stick on grid, pack of 10

## 200 PLACE STORAGE BOXES

#### Manufactured from translucent 100% virgin polypropylene. Suitable for use

with microtubes, vials and cryogenic vials from 0.5 to 2ml (Maximum tube height is 53.5mm). Temperature range -80°C to 135°C Each box has an alpha

numeric grid on the lid section for easy reference. Stackable and can be used in most storage systems in place of 2, 100 position boxes.



Dimensions: 275 x 140 x 64mm.

#### ORDERING INFORMATION

Box only	With stick on grid	
1158250	1158088	storage box 200, natural
1171751		storage box 200, black

## UK MADE 1.5ML MICRO TUBES

Our 1.5mL microtubes are manufactured in 100% virgin polypropylene. Manufacturing in the UK means a lower carbon footprint and high quality.

- Graduated at 0.1, 0.5, 1.0 and 1.5mL
- Temperature range -80°C to +121°C
- Centrifugation to 15,000xg
- Frosted writing panel on tube and cap
- Comfort tab for easy closing

#### Black 1.5mL micro tubes



These tubes are completely opaque ideal for the storage of photo sensitive solutions.

ORDERING INFORMATION -PACKS OF 500 TUBES

1158367	Natural
1158363	Amber
1158364	Blue
1158366	Green
1158368	Orange
1158369	Red
1158370	Violet
1158371	Yellow
1158365	Black
1179617	Mixed bulk pack - mixed colours, pack of 5,000 tubes

## UK MADE 5ML CONICAL TUBES



Manufactured from 100% virgin polypropylene these unique tubes are ideal for biological and chemical solution preparation. Temperature -80°C to +121°C. Centrifugation to 5,000xg graduated at 1ml intervals

THEFT

## ORDERING INFORMATION

4459427	Natural	pack of 250
1158127	INALUIAI	1
1158124	Blue	pack of 250
1158126	Green	pack of 250
1158128	Red	pack of 250
1158129	Yellow	pack of 250
1158125	Black	pack of 250
1162361	Natural without lid	pack of 250
1158131	free standing without lid	pack of 250
1158130	free standing, natural*	pack of 250

## PIPETTE RESERVOIR

Trifill is a reversible pipette reservoir with a single reagent reservoir (50mL) one side and 8 channel reservoirs on the other.

## ORDERING INFORMATION

1158217 TriFill pipetting reservoir pack of 10

D01954 233110



Available as a 48 or 96 well rack, depending on your preference. These racks can be flipped over, one side can take 0.2/0.5ml tubes and the reverse side, 1.5/2.0ml tubes.

- Suitable for use down to -80°C and up to +121°C
- Made from virgin polypropylene
- Graduated wells to help stabilise tubes
- Suitable for PCR and microcentrifuge tubes
- Graduated wells help stabilise tubes
- Each rack is impressed with an alpha numeric grid to aid tube identification.
- Snap on clear lid also available for 96 well rack

#### **SPECIFICATION**

**48 POSITION RACK** 

Dimensions (LxWxH):

96 POSITION RACK™ Dimensions (LxWxH):

ORDERING INFORMATION

1146452	96 position, natural
1146453	96 position, red
1146454	96 position, yellow
1146450	96 position, blue
1146451	96 position, green
1158218	Cover for 96 position rack
1158212	96 position, natural - with cover
1158208	96 position blue - with cover
1158209	96 position green - with cover
1158213	96 position red - with cover
1158215	96 position yellow - with cover
1146447	48 position, natural
1146448	48 position, red
1146449	48 position, yellow
1146445	48 position, blue
1146446	48 position, green

## FLOATING MICROTUBE RACK

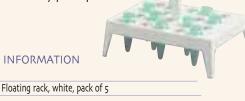
A low cost, general-purpose polypropylene microtube rack ideal for floating tubes in water baths, tubs or beakers. This versatile rack features unique slits which can hold 0.2, 0.5, 1.5 and 2.0ml microtubes.

Overall size: (lxwxh) 133 x 90 x 40mm

ORDERING INFORMATION

1158217

Holds 18 tubes and each position is numbered. Carry handle for easy pick up.



## VARIABLE POSITION MICRO CENTRIFUGE TUBE RACK

This unique 3D bench-top rack holds up to 48 micro centrifuge tubes.

Manufactured from ABS, it is lightweight, strong and rigid at low temperatures. Each tube can be placed in either a forward, backward or upright position, which can be used to help track the steps of a preparation in each tube.

The rack has 2 rows of 12 holes, which will accommodate 2 tubes per angle section. Each tube section has alphanumerics for sample identification.

A white, wipe clean writing area is positioned in front of each row for marking and can be replaced once worn.

## ORDERING INFORMATION

1158307	Cream Rack	
1158308	Pink Rack	
1158305	Blue Rack	

3D racks are supplied with 1 black and 1 red marker pen

1158414	Marker pen, black	Pack of 10
1158415	Marker pen, red	Pack of 10

## MICROARRAY SLIDE HOLDERS

These polypropylene slide holders are designed to facilitate the manipulation of micro-array slides during the various stages of microarray production, hybridisation and detection process. The holder allows a 25 x 75mm array slide to be held securely inside a 50ml centrifuge tube.

#### **Features**

1158384

1158385

1158383 1158387

1158386

- The slide bed is angled backward slightly to ensure the slide is pressed down against the holder when the slide is centrifuged in a swing out bucket rotor
- Slide clips do not protrude onto the area of the slide used for spotting by most commercial spotting robots
- The surface area of the holder which is in contact with the slide has been kept to a minimum. This minimises the potential of liquid being trapped between the slide and adaptor
- Holders are compatible with the majority of disposable 50mL tubes

## ORDERING INFORMATION

cream, pack of 20

green, pack of 20 blue, pack of 20

orange, pack of 20

mixed pack of 20





215 x 69 x 27mm

215 X 131 X27mm

# PLASTICS

## CAMLAB PCR PLATES

96 and 384 well plates with thin polypropylene walls, intended for all types of thermal cycler.

- Printed alphanumeric grid
- Inflexible, non-deformable when exposed to heat
- Skirted or ultra flat non-skirted models
- Certified as free from DNase and RNase, human DNA and pyrogens
- Non-sterile

#### ORDERING INFORMATION

Part No	Wells	Туре	Width (mm)	Depth (mm)	Height (mm)
1161441	96 well	non skirted	75.95	119.89	21.01
1161442	96 well	semi-skirted	85.52	125.68	22.12
1161443 1161444	96 well	skirted	85.85	127.76	15.52
1161444	96 well				
1161445	384 well	non skirted	81.92	123.67	

## DEEP WELL PCR PLATES

A range of economical 96 well deep wall plates for gene sequencing, drug screening, molecular biology and disease control.

Ideal as collection plates for 96 well vacuum filtrations and collecting small volume extractions.

- Resistant to harsh organic solvents Very low metal content
- Compatible with automated DNA extraction equipment
- Autoclavable at 121°C for 20 mins
- Maximum centrifugation 4000xg
- DNase, RNase Free
- Can be used with self adhesive plate seals, or sealing film

#### ORDERING INFORMATION

Part No	Wells	Туре	Well volume
1200222	96 well	square wells	1.6 ml
1200223	96 well	square wells	2.2 ml
1200224	96 well	round wells	1.0 ml



## PCR WORKSTATIONS

Manufactured in either polypropylene or polystyrene, these handy racks can accommodate strips of 8 or 12 x 0.2ml PCR tubes for filling by a multichannel pipette.

- Racks have alphanumeric grid for sample and well identification
- Sliding lid for added security
- Stackable when lid closed
- Each rack has label/tag holder
- Can be used by attaching multi-channel pipette reservoir
- Dimensions; 36mm H x 96mm W x 127mm D

#### ORDERING INFORMATION

1158381	Clear, Polystyrene - Pack of 5	
1158111	Blue, Polystyrene - Pack of 5	
1158382	Natural, Polypropylene - Pack of 5	

## VARIBOX PLATE STORAGE SYSTEM

Manufactured from polystyrene for high clarity, these boxes allow storage of 5 stacked microtitre plates.

- Boxes are stackable (both on their base or inverted). Location guide in corner
- Can be used as container/tank for solid and aqueous applications
- Dimensions; 78mm H x 120mm W x 156mm D

#### ORDERING INFORMATION

1158251 Varit

Varibox Pack of 4







# eG

# REAGENT RESERVOIR 8000

Reservoir suitable for use with any 8-channel micropipette

Designed to prevent the formation of bubbles in the pipette tips and allows you to use more accurate amounts of reagents avoiding expensive waste.



- Reservoirs can be interconnected
- Available in three colours, natural, blue and yellow to identify different samples or reagents
- Manufactured from virgin polypropylene
- The product may be autoclaved
- Graduated to 8ml, maximum volume 10ml
  Available as reservoirs only or as combined unit set with
- either o.2ml PCR or o.5ml tube carriers
- Reservoir acts as a base for the tube carriers
- PCR carrier can accept 8 individual o.2ml tubes or a strip of 8 tubes
- 0.5ml carrier can accept up to 6 individual tubes

## ORDERING INFORMATION

1158373	Polypropylene Reservoir 8000 Natural Pack of 10
1158372	Polypropylene Reservoir 8000 Blue Pack of 10
1158374	Polypropylene Reservoir 8000 Yellow Pack of 10
1158376	Polypropylene Reservoir 8000 + 0.2ml Tube Carrier Set in Natural Pack of 10
1158375	Polypropylene Reservoir 8000 + 0.2ml Tube Carrier Set in Blue Pack of 10
1158377	Polypropylene Reservoir 8000 + 0.2ml Tube Carrier Set in Yellow Pack of 10
1158379	Polypropylene Reservoir 8000 +0.5ml Tube Carrier Set in Natural Pack of 10
1158378	Polypropylene Reservoir 8000 +0.5ml Tube Carrier Set in Blue Pack of 10
1158380	Polypropylene Reservoir 8000 +0.5ml Tube Carrier Set in Yellow Pack of 10

## MICROSCOPE SLIDE STORAGE BOX

These polystyrene microscope slide boxes for safe and efficient storage and organisation of microscope slides.

Each box will hold 100 slides, 1 per slot. The slide tray is coloured to allow easy identification, and has slot numbers to allow for indexing of slides



- Higher density slide storage can be achieved by placing 2 slides in each slot
- Transparent lid. Stackable for compact storage
- Frosted writing area for ease of writing
- Each tray has drainage holes for wet applications

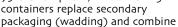
## ORDERING INFORMATION

Microscope Slide Box, Red	
Microscope Slide Box, Yellow	
Microscope Slide Box, Orange	
Microscope Slide Box, Green	
Microscope Slide Box, Blue	
	Microscope Slide Box, Yellow Microscope Slide Box, Orange Microscope Slide Box, Green

## SPECISAFE MAILING CONTAINERS

These sample mailing container packs are a unique packaging concept that make patient sample packaging simple and cost effective.

Providing your primary container is 95 kPa compliant, these mailing



a highly absorbent material and rigid container within a single piece.

Just add a padded envelope or bag as your outer packaging.

#### ORDERING INFORMATION

1195343	SpeciSafe EDB Mailing Container 10 Vial 150 x 125mm Pack of 250
1200534	SpeciSafe Mailing Container 2 x SampleTite 40/60/90ml Pack of 170
1195344	SpeciSafe EDB Mailing Container 10 Vial 150 x 125mm Pack of 50
1195345	SpeciSafe ATP Mailing Container 3 Vial 165 x 115mm Pack of 210
1195346	SpeciSafe ATP Mailing Container 3 Vial 165 x 115mm Pack of 50
1195347	SpeciSafe MGN Mailing Container 6 Vial 115 x 165mm Pack of 210
1195348	SpeciSafe MGN Mailing Container 6 Vial 115 x 165mm Pack of 50
1195349	SpeciSafe Multivial Mailing Container 170 x 75mm Pack of 300
1195350	SpeciSafe Multivial Mailing Container 170 x 75mm Pack of 100
1195351	SpeciSafe Blood Vial Mailing Container 155 x 40mm Pack of 500
1195352	SpeciSafe Blood Vial Mailing Container 155 x 40mm Pack of 100
1195353	SpeciSafe Compact Urine Mailing Container 75 x 170mm Pack of 300
1195354	SpeciSafe Compact Urine Mailing Container 75 x 170mm Pack of 100
1195355	SpeciSafe GSTS Mailing Container 5 Vial 160 x 165mm Pack of 180
1195356	SpeciSafe UKNS Mailing Container 4 Vial 155 x 75mm Pack of 210
1195357	SpeciSafe Compact Swab Mailing Container 165 x 75mm Pack of 300
1195358	SpeciSafe Mailing Container 3x3ml Vials 155 x 40mm Pack of 500
1195359	Padded Envelopes For Mailing Containers With UN Labels UN3373 Compliant Pack of 100
1195360	White Opaque Polythene Envelopes For Mailing Container UN3373 Compliant Pack of 500
	· ·

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# PLASTICS

## WATER SAMPLING BOTTLES PET

These transparent PET water sampling bottles are ideal for transporting water samples.

- Available sterile, Gamma irradiated at 25-40 KGy
- Available dosed with sodium thiosulphate ideal for sampling for microbiological tests
- Tamper evident cap
- Traceable
- Choice of 3 sizes, 330ml, 500ml and 1000ml
- All sizes take a 28mm thread cap
- All sizes have 21mm internal neck
  diameter



Each bottle is labelled specifying description, code, lot and expiry date. They are also available dosed with 24mg/l of thiosulphate to inhibit the action of chlorine, bromine and ozone on the sample. This is primarily for drinking water and pool water where these disinfectants are likely to be present.

These products supplied with up to 2 years shelf life

#### ORDERING INFORMATION

1169053	330ml PET Sterile Bottle Clear Round With Screw Cap & Label Pack of 54
1176865	Sterile Water Sample Bottle Narrow-Mouth 500ml Pack of 40 Supplied unlabelled
1169054	330ml PET Sterile Bottle Clear Round W/ Screw Cap & Label Dosed with Sodium Thiosulphate Pack of 54
1127265	500ml PET Non Sterile Bottle Clear Round With Screw Cap & Label Pack of 40
1169055	500ml PET Sterile Bottle Clear Round With Screw Cap & Label Pack of 40
1169056	500ml PET Sterile Bottle Clear Round W/ Screw Cap & Label Dosed with Sodium Thiosulphate Pack of 40
1127266	1000ml PET Non Sterile Bottle Clear Round With Screw Cap & Label Pack of 18
1169057	1000ml PET Sterile Bottle Clear Round With Screw Cap & Label Pack of 18
1169058	1000ml PET Sterile Bottle Clear Round W/ Screw Cap & Label Dosed with Sodium Thiosulphate Pack of 18

## DRYWIPE MARKERS

Drywipe marker pens as supplied with our 3D racks - ideal for temporary labelling of plastic products.

Available in black or red.



#### ORDERING INFORMATION

1158414	Marker pen, Black Pack of 10
1158415	Marker pen, Red Pack of 10

## 5ML PREP TUBES - STERILE

Sterile 5ml Prep Tube ideal for solution preparation, both biological and chemical where sterility is required. Suitable for microbial incubation and pellet preparation.

- Supplied with Certificate of Irradiation on request
- Irradiated to a dose of between 25-40kGy (Kilogray)
- Manufactured from high quality virgin polypropylene
- Ideal for solution preparation, both biological and chemical
- Suitable for microbial incubation and pellet preparation
- Can be used from -80°C to 121°C
- Autoclavable at 120°C 15psi for 15 minutes
- Can stand centrifugation to 5,000xg
- Frosted area for marking on both side and cap
  Graduated at 1ml intervals

## ORDERING INFORMATION

1195436	Sterile 5ml Prep Tube Conical With Cap Pack of 250 (Case of 10
	bags x 25 Tubes)

## MICROTUBE OPENER

Microcentrifuge tube openers, designed to open 1.5ml tubes without contaminating samples.

Colours include pink, yellow, orange, blue, black and green.



The colours you receive will vary from pack to pack.

1137606	Pack of 10 Microtube openers - mixed colours
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# PLASTICS



When the security and integrity of your samples matters, choose Camlab for tamper evident tubes, bottles and buckets.

If you are sampling solids or liquids from 1.5 ml up to 20 L we can supply secure, tamper evident sample storage to suit you. Browse the range below, or contact us if you require bulk quantities.

## 5ml / 10ml Transport Tubes with Security Caps

Designed for sample collection and transport where sample security and integrity is key. The tamper evident cap provides proof that the sample has not been opened before.

Leak proof cap with unique security

- seal to assure sample security.Conical design with free standing base
- Moulded graduations in 1mL steps.
- Made of high clarity polypropylene.
- Temperature range -90°C to 121°C
- Choice of 5 or 10ml and with a range of coloured caps for sample identification

1158338	5ml PP Tube With White Tamper Evident Cap Pack of 250
1158336	5ml PP Tube With Blue Tamper Evident Cap Pack of 250
1158337	5ml PP Tube With Pink Tamper Evident Cap Pack of 250
1158341	10ml PP Tube with White Tamper Evident Cap Pack of 250
1158339	10ml PP Tube with Blue Tamper Evident Cap Pack of 250
1158340	10ml PP Tube with Pink Tamper Evident Cap Pack of 250

# Double Tamper Evident Bottles 200ml

The Camlab Double Tamper Evident bottle, is the ideal sample collection device in situations where sample security is paramount.



The bottle itself manufactured from HDPE and the Cap and tamper ring is made from polypropylene.

The bottle is provided with the cap in place, secured by optional shrink-wrapped ring and the first security seal intact.

Unscrewing and opening the bottle releases the first

security ring which is retained on the neck of the bottle. • The bottle can then be used to collect and store the sample before the cap is replaced and re-sealed

- This then engages a second security ring which will break if an attempt is made to tamper with the sample before testing
- Graduated to 100ml

Simple to use;

- Remove the plastic wrap
- Open the lid, snapping off the first ring
- Fill with sample and replace the lid

• At the lab open the bottle, snapping off the second ring and proving it has not been opened since sample collection

1155037	Double Tamper Evident Bottle 200ml White Cap Pack of 100
1181292	Double Tamper Evident Bottle 200ml White Cap Pack of 10
1155038	Double Tamper Evident Bottle 200ml White Cap Shrink Wrap Neck Ring Pack of 100
1181293	Double Tamper Evident Bottle 200ml White Cap Shrink Wrap Neck Ring Pack of 10

## SSK Secure Sample Keep 1.5ml tubes

The Secure Sample Keep (SSK) incorporates a push fit tamper evident closure for applications where sample security and integrity is essential.

- Ideal for product packaging for small, valuable items or reagents
- Temperature range -85°C to 121°C
- Manufactured from a high quality
- polypropylene. • Graduated at 0.1, 0.5, 1.0 and 1.5mL
- Centrifugation to 15,000xg
- Once closed the user will know if the tube has been opened, either by accident or intentionally, as once the seal is broken the tamper evident ring loosens
- Once the seal is broken, the secure microtube becomes a conventional tube
- The tube is 11mm diameter and is 42mm tall with cap closed.

1158432	SSK 1.5ml Tamper Evident Microtube - Natural Pack of 500
1158428	SSK 1.5ml Tamper Evident Microtube - Free Standing Natural Pack of 500
1158108	SSK 1.5ml Tamper Evident Microtube - Red Pack of 500
1158429	SSK 1.5ml Tamper Evident Microtube - Free Standing Red Pack of 500
1158433	SSK 1.5ml Tamper Evident Microtube - Yellow Pack of 500
1158430	SSK 1.5ml Tamper Evident Microtube - Free Standing Yellow Pack of 500
1158425	SSK 1.5ml Tamper Evident Microtube - Blue Pack of 500
1158426	SSK 1.5ml Tamper Evident Microtube - Free Standing Blue Pack of 500
1158431	SSK 1.5ml Tamper Evident Microtube - Green Pack of 500
1158427	SSK 1.5ml Tamper Evident Microtube - Free Standing Green Pack of 500

#### White Plastic Buckets with Tamper Evident lids

Plastic buckets with tamper evident lids and a choice of a metal or plastic handles, suitable for food products and non hazardous chemicals.



Made from Polypropylene Copolymer.

Can be Autoclaved.

1L White Bucket with Tamper Evident Lid and Plastic Handle Pack of 10
2.5L White Bucket with Tamper Evident Lid and Plastic Handle Pack of 10
5L White Bucket with Tamper Evident Lid and Plastic Handle Pack of 10
10L White Bucket with Tamper Evident Lid & Metal Handle
16L White Bucket with Tamper Evident Lid and Handle
20L White Bucket with Tamper Evident Lid and Metal Handle with Plastic Hand Grip

\_sales@camlab.co.u

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## 2 TIER RACKS FOR 30MM DIAMETER TUBES

#### Racks to hold up to 18x tubes of up to 30mm diameter

- Designed for use on the bench, in a water bath, shaker, fridge, freezer or incubator
- Suitable for use from -20°C to +80°C
- Available in a choice of 3 colours for quick identification
- Base is manufactured in strengthened polypropylene and the top in ABS to add toughness
- Base later has rounded wells with drain holes so liquid quickly drains out after use in a water bath
- Carry handles on each end of the rack
- Easily stackable to save space in storage
- The rack has 18 spaces, 30mm x 30mm, in a 3 x 6 array.
- Dimensions; 35mm H x 275mm L x 135mm W

#### Please note: these racks are NOT autoclavable.

ORDERING INFORMATION

	1158197	1158196	1158195
Single rack for up to 18 tubes in;	Red	Green	Blue

## 2 TIER RACKS FOR 5ML / 16MM DIAMETER TUBES

Racks to hold up to 6ox tubes of up to 16mm diameter, particularly suited for our 5ml prep tubes.

- Ergonomically designed for use on the bench, in a water bath, shaker, fridge, freezer or incubator.
- Available in a choice of 3 colours for quick identification
- Base is manufactured in strengthened polypropylene and the top in ABS to add toughness
- Base layer has rounded wells with drain holes so liquid quickly drains out after use in a water bath
- Carry handles on each end of the rack
- Easily stackable to save space in storage
- Suitable for use from -20°C to +80°C
- The rack has 60 spaces, 16mm x 16mm, in a 12 x 5 array.
- Dimensions; 35mm H x 275mm L x 135mm W

Please note: these racks are NOT autoclavable.

#### ORDERING INFORMATION

	1158194	1158193	1158192
Single rack for up to 18 tubes in;	Red	Green	Blue

## HEIGHT ADJUSTABLE FREEZER BOXES WITH ADJUSTABLE DIVIDERS

Ideal for labs where a range of tubes are used, these storage boxes can be height adjusted and have a removable and adjustable grid divider system.

Grid dividers can be fitted to split the box into anything from 4 place (2 dividers) to 81 place (16 dividers). The boxes are supplied empty and grids are available separately.

- Manufactured in virgin translucent polypropylene
- Height adjustable, uses 'stops' for heights of 61mm, 50mm, and 43mm
- For use with vials, tubes, microtubes from 0.5 to 2ml volume
- Temperature range -80°C to 135°C
- Suitable for use in ultra-low freezers
- Suitable for autoclaving (15 minutes at 121°C)
- DIY grid available in same colours for you to choose how many divisions per box (from 4-81)
- 130mm wide x 130mm deep, height adjustable from 43mm to 55mm

Please note you must purchase boxes and dividers separately.

Colour	Mixed pack	Natural	Red	Green	Blue	Yellow	Black	Orange
Pack of 5 boxes, order code;	1158274	1158275	1158277	1158273	1158271	1158278	1158272	1158276
Pack of 16 dividers (to split 1 box into 81 places) order code;	-	1158282	1158284	1158281	1158279	1158285	1158280	1158283







# **3 TIER AUTOCLAVABLE TUBE RACKS**

## Fully autoclavable racks for 15ml centrifuge tubes.

- Carrying handles on either end of the rack, ideal for use in a water bath
- Can be stored at temperatures down to -80°C
- 60 place rack each hole is 16mm diameter ideal for test tubes or 15ml centrifuge tubes
- Offers a good balance of thermal and chemical properties with moderate strength
- Low density and has a good strength to weight ratio.
- Excellent chemical resistance with very low permeability to water, vapour, gases
- Meets the requirements of the U.S. Food and Drug Administration
- Can be used in direct contact with foods
- Made from virgin polypropylene
- Please note, Gasoline, Xylene, and Chlorinated solvents will swell and soften this material
- Dimensions: (LxWxH) 270mm L x 135mm W x 64mm H

ORDERING	INFORMATION		
Single Rack	Box of 10 assembled	Box of 15 unassembled	
1191008	1181378	1181379	Blue autoclavable 3 tier rack for 60 x 16mm tubes
1191010	1181382	1181383	Pink autoclavable 3 tier rack for 60 x 16mm tubes
1191011	1188391	1188392	Yellow autoclavable 3 tier rack for 60 x 16mm tubes
1191009	1181380	1181381	Green autoclavable 3 tier rack for 60 x 16mm tubes

## 3 TIER TUBE RACKS

A range of 3 tier racks to hold micro, test tubes or falcon tubes designed for use on the bench, in a water-bath, shaker, fridge, freezer or incubator.



- Ergonomically designed
- Available in a range of three colours and three sizes
- For use with test tubes, microtubes or 50ml falcon tubes depending on the size.
- Base and top are manufactured in strengthened polypropylene
- Mid section in ABS to improve impact resistance and toughness
- Carry handle at one end
- 3-tier design adds stability to taller tubes
- Easily stackable
- Dimensions; 63mm H x 135mm W x 275mm D

Please note: these racks are NOT autoclavable.

#### ORDERING INFORMATION

1158198	3 Tier Rack For 13mm Tubes - Blue holds up to 84 tubes
1158199	3 Tier Rack For 13mm Tubes - Green holds up to 84 tubes
1158200	3 Tier Rack For 13mm Tubes - Red holds up to 84 tubes
1158201	3 Tier Rack For 16mm Tubes - Blue holds up to 60 tubes
1158202	3 Tier Rack For 16mm Tubes - Green holds up to 60 tubes
1158203	3 Tier Rack For 16mm Tubes - Red holds up to 60 tubes
1158204	3 Tier Rack For 30mm Tubes - Blue holds up to 18 tubes
1158205	3 Tier Rack For 30mm Tubes - Green holds up to 18 tubes
1158206	3 Tier Rack For 30mm Tubes - Red holds up to 18 tubes
-	

## 2 TIER TUBE RACKS

Racks to hold up to 84x tubes of up to 13mm diameter

- Ergonomically designed for use on the bench, in a water-bath, shaker, fridge, freezer or incubator
  - For use with tubes of 13mm diameter
- Available in a range of three colours and three sizes
- Base is manufactured in strengthened polypropylene and top section in ABS to improve impact resistance and toughness
- Base tier has rounded wells with drain holes
- Carry handle on end of the rack
- Easily stackable to conserve space
- Can be used from -20 to +80°C
- The rack has 84 spaces, 13mm x 13mm, in a 14 x 6 array
- Dimensions; 35mm H x 275mm L x 135mm W

Please note: these racks are NOT autoclavable.

1158189	2 Tier Rack For 13mm Tubes - Blue holds up to 84 tubes
1158191	2 Tier Rack For 13mm Tubes - Red holds up to 84 tubes
1158190	2 Tier Rack For 13mm Tubes - Green holds up to 84 tubes





## PLASTICS

## 64 PLACE STACKABLE RACK INSERTS

These handy racks can accommodate 64 x 1.5ml or 0.5ml microtubes either for temporary holding on the bench, or to use with the 100 place freezer box for storage.

- Built in feet prevent the tubes from touching the bench.
- Alphanumeric grid moulded into the rack for easy sample identification.
- Handle in the centre of the rack allows it to easily be moved in and out of the freezer box.
- The racks stack together for compact storage.
- Suitable for use down to -80°C
- 135mm width x 135mm depth x 54mm height

#### ORDERING INFORMATION

1146469	Natural - for 0.5ml tubes - Pack of 10
1145470	Red - for 0.5ml tubes - Pack of 10
1145468	Green - for 0.5ml tubes - Pack of 10
1145467	Blue - for 0.5ml tubes - Pack of 10
1145471	Yellow - for 0.5ml tubes - Pack of 10
1158240	Black - for 0.5ml tubes - Pack of 10
1146474	Natural - for 1.5ml tubes - Pack of 10
1146475	Red - for 1.5ml tubes - Pack of 10
1146473	Green - for 1.5ml tubes - Pack of 10
1146472	Blue - for 1.5ml tubes - Pack of 10
1146476	Yellow - for 1.5ml tubes - Pack of 10
1158246	Black - for 1.5ml tubes - Pack of 10

## 81 PLACE FREEZER BOXES

Handy storage boxes for tubes of up to 2ml capacity with alphanumeric grid built in to the clear lid for quick identification.

- Manufactured from virgin polypropylene
- 9x9 grid to take up to 2ml tube
- Grid on top and bottom for easy identification of sample
  Autoclavable at 121°C
- Drainage holes in base
- Available in a range of colours for coding your experiment
- 50mm high x 129mm wide x 129mm deep

#### ORDERING INFORMATION

1158775	Blue	
1158776	Green	
1158777	Natural	
1158778	Red	
1158779	Yellow	

## 81 PLACE MAXICOLD RACKS

Manufactured from virgin polypropylene, these racks are suitable for use with most microtubes, vials and tubes up to 12mm diameter



- Very lightweight and easily transportable
- Wells have lower conical profile to ensure microtubes are kept upright
- Also available with slip on lid that permits stacking of racks
  - for compact storage
- Available in 5 colours
- Both rack and lid have frosted area for writing on
- Dimensions; 27mm H x 137mm W x 145mm D

#### ORDERING INFORMATION

1158328	Natural - Pack of 5 racks without lids
1158329	Pink - Pack of 5 racks without lids
1158326	Green - Pack of 5 racks without lids
1158325	Blue - Pack of 5 racks without lids
1158330	Yellow - Pack of 5 racks without lids
1158327	Mixed pack of 5 racks without lids
1158333	Natural - Pack of 5 racks with lids
1158334	Pink - Pack of 5 racks with lids
1158115	Green - Pack of 5 racks with lids
1158331	Blue - Pack of 5 racks with lids
1158335	Yellow - Pack of 5 racks with lids
1158332	Mixed pack of 5 racks with lids

## **100 PLACE LONG FREEZER BOXES**

Manufactured from pure polypropylene, this box will hold up to 100 microcentrifuge tubes, vials and cryovials from 0.2ml to 2ml.



Easy to pull from standing freezers, without the need to reach right to the back as with shorter boxes.

• Adjustable height lid

• Accommodates tubes up to 50mm in height and 12mm in diameter

- Temperature range for use is -80°C up to +135°C, suitable for use in ultra low freezers
- Lid are embossed with an alphanumeric grid.
- Autoclavable
- Dimensions; 38-52mm H x76mm W x 287mm D

#### ORDERING INFORMATION

1181359	Natural - single box	
1188002	Black - single box	
1188003	Red - single box	
1188004	Green - single box	
1188005	Blue - single box	

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# PLASTICS

## **RECYCLED RANGE OF RACKS AND BOXES**

A range of environmentally friendly recycled 100 place storage boxes and 48 & 96 place racks.

As these products are made from recycled materials, the colour will vary each time from items pictured, but the boxes and racks are always of the highest quality.

Box Specifications:

- Manufactured from 50% recycled material (Lid is manufactured from non recycled Virgin Polyproplyene)
- Taller than most standard boxes, can take up to 53.5mm tubes
- For use with vials, tubes, microtubes from 0.5 to 2ml volume
- Temperature range -80°C to 135°C •
- Suitable for use in ultra-low freezers
- Suitable for autoclaving (15 minutes at 121°C)
- Alphanumeric grid on lid for easy reference
- Stackable, with hinged lid • 140mm W x 140mm D x 62mm H
- All boxes also available with self adhesive grid which attaches to the underneath of the box

Rack Specifications:

- Manufactured from recycled material
- Rack is reversible and takes 0.5ml tubes on one side, 1.5/2ml on the reverse
- Suitable for both PCR and microcentrifuge tubes .
- Graduated wells to help stabilise 1.5ml tubes •
- Has been designed as larger than standard rack to allow you to work easily with screw cap vials •
- Suitable for use down to -80°C •
- Snap on cover available for 96 position rack





1470

#### ORDERING INFORMATION

100 place freezer box with hinged lid	48 well reversible rack for 0.5ml or 2ml tubes	96 well reversible rack for 0.5ml or 2ml tubes
1195673	1195674	1195675

## **STEP RACK**

A flexible rack that presents tubes at 3 increasing heights, allowing easy access to tubes at the rear.

It can also be stacked higher with add on legs.

Manufactured in polystyrene, the 24 place microtube rack has graduated wells for stability

- Can be used as a liquid workstation.
- Available as single rack or as a stackable set with 'legs'
- Each sample row is numbered 1-8
- Can also accommodate most standard tubes, vials and microtubes of 12mm diameter
- Rack set comes with 4 racks and set of 12 legs

#### ORDERING INFORMATION

1158187	Polystyrene micro tube rack - single (fits 24 vials over 3 levels)
1158303	Set of 4 racks with supports (fits 96 vials over 12 levels)

## XY REVERSIBLE RACKS

Manufactured from virgin polypropylene, the rack is reversible and takes 0.5ml tubes on one side, 1.5/2ml on the reverse.

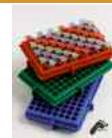
Unique sliding markers allow you to track progress as you work across the rack.

- Suitable for both PCR and microcentrifuge tubes
- Graduated wells to help stabilise 1.5ml tubes
- Unique slider system combined with alphanumeric grid keeps track of samples being worked on
- Suitable for use down to –80°C
- Available in three bold colours
- Dimensions; 27mm H x 131mm W x 215mm D

## ORDERING INFORMATION

1158221	Single rack in red	
1158219	Single rack in blue	
1158220	Single rack in green	







isales@camlab.co.uk



sales@camlab.co.uk

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# PLASTICS

## **PP INVENTORY SYSTEM**

A lightweight alternative to stainless stee inventory systems suitable for use with most standard microtubes, vials and tube

- All parts manufactured from virgin polypropylene
- Suitable for use with most standard microtubes, vials and tubes
- A lightweight alternative to stainless steel inventory systems
- Suitable for use down to -80°C
- Available with boxes/racks already packed in a five level unit
- Integrated carry handle for easy transport
- Combipack 405 contains five 81 section freezer racks with slip on lids (for maximum tube height 55mm)
- Combipack 500 contains either five 100 place boxes with hinged lids (for 0.5 2ml tubes)
- For the Combipack 500 choose from coloured boxes for identification or black boxes for light sensitive samples
- All systems are 420mm H x 160mm W x 160mm D

#### ORDERING INFORMATION

1158322	PP Sample Store - filled with 81 place Maxicold Racks
1158323	PP Sample Store - filled with 100 place freezer boxes, mixed
1158324	PP Sample Store - filled with 100 place freezer boxes, black

## **BIJOUX / VIAL STORAGE BOX**

This clear polycarbonate storage box has an integral white rack to accommodate 25 bijou bottles or small vials of up to 18 mm diameter.

- Manufactured in 100% virgin polycarbonate
- Suitable for storage of bijou bottle vials and other small vessels up to 18 mm diameter and 48 mm height
- Store bijous and vials on the bench, in the fridge, freezer or even in cryogenic storage - suitable for temperatures down to -196°C
- Box dimensions; 132 mm width x 132 mm depth x 55 mm height
- Maximum vial dimensions; 18 mm diameter x 48 mm height
- Compatible with most liquid nitrogen inventory systems or can be stacked without an inventory system
- Drainage and air vents in the lid and base
- Frosted top and base with crystal clear sides for easy viewing of the contents

#### ORDERING INFORMATION

1201977 25 Place Bijoux vials storage box, Polycarbonate

## MULTICLIP - ADJUSTABLE TIE

A unique multipurpose fastener which will secure a wide variety of objects of many shapes and sizes.

Will provide an easy, secure fixing without the need for tools and is re-useable, will not rust and is invaluable in an emergency.



The camlab Multiclip can be tightened to any regular or irregular diameter between 1cm and 10cm and can be linked together to cater for larger diameters.

- Maximum Tightening Force: 60 100 kilograms (220 lbs)
- Breaking Strain: 60 100 kilograms (220 lbs)
- Temperature Range: -20°C to +100°C

The clip can be used at temperatures up to 150°C but between 100-150°C there is a reduction in tensile strength

#### ORDERING INFORMATION

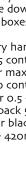
1138367 Multiclip fastener 1cm to 10cm diameter - Pack of 5

# STAINLESS STEEL CRYOGENIC

A diverse range of robust chest and upright stainless steel racking systems for storing freezer boxes down to liquid nitrogen temperatures.



REFERENCE	DESCRIPTION
1171482	chest freezer rack for 6x100 place boxes
1171483	chest freezer inventory rack for 7x100 place boxes
1171484	chest freezer inventory rack for 8x100 place boxes
1171485	chest freezer inventory rack for 9x100 place boxes
1171486	chest freezer inventory rack for 10x100 place boxes
1171487	chest freezer inventory rack for 11x100 place boxes
1171481	chest freezer inventory rack for 5x100 places boxes (half height)



## STICK OFF LABELS

'Stick-off labels' are used in the conventional way with the added advantage of being easily removed by simply immersing in water.

• Suitable for low temperature work



- down to -70°C • Fits a variety of bottles, flasks, beakers and other laboratory
- containers
- 100% biodegradable
- Adhesive completely dissolves in any water temperature in 30 seconds - the label can then be easily lifted off the surface by hand
- If removing the labels in a glasswasher cycle, please ensure the filter is emptied and cleaned after each cycle to remove any label pieces that remain on the filter

#### ORDERING INFORMATION

1158434	25 x 25mm - Pack of 2500	
1158437	50 x 25mm - Pack of 2500	
1158438	50 x 38mm - Pack of 2500	

## HI-LOW LABELS - FOR FREEZER TO OVEN

Self adhesive vinyl labels available as both rolls and sheets.

Can be used with most laser and inkjet printers for clear and quick bulk label creation.



Smear resistant. Offer a high degree of chemical resistance, humidity and UV resistance. Can be used on polypropylene and polycarbonate surfaces.

Will not shrink if using at the higher temperature band.

Suitable for use between -85°C and 100°C, can also be applied at -85°C.

Printing templates for the sheets of labels are available to download from our website.

## ORDERING INFORMATION

1158134	33 x 13mm strips - Reel of 1,000
1158135	20 x 6mm strips - Reel of 1,000
1158136	33 x 13mm strips - Pack of 22 sheets, each sheet with 90 labels
1158137	25 x 13mm strips - Pack of 16 sheets, each sheet with 126 labels

## TUBEES DOTS AND STRIPS

Self-adhesive labels available in individual boxes of dots and strips on handy dispensing reels.

Suitable for use with microtubes, vials, test tubes, chromatography samples and other small volume tubes



Strong permanent pressure sensitive adhesive. Can be used from -20°C to 40°C (application temperature 5°C)

Box packaging is made from offcuts from sustainable forestry and is fully recyclable.

## ORDERING INFORMATION

1146433	Tubees Strips 32 x 13mm - Reel of 1,000 Yellow labels
1146432	Tubees Dots 9.5mm diameter - Reel of 5,000 mixed
	(1 roll with 5 rows - purple, red, white, yellow and numbers 1-9)

## THERMAL TRANSFER LABELS

Thermal transfer labels in a range of sizes.

Solvent resistant labels offer improved label quality and higher throughput.



For use in the Zebra thermal printers but compatible with other makes.

#### Supplied in rolls.

ORDERING INFORMATION

1169670	25 x 67mm strips - Roll of 100
1170868	13 x 24mm strips - Roll of 1,000
1170870	6 x 33mm strips - Roll of 1,000
1170873	20 x 24mm strips - Roll of 1,000
1169667	6 x 20mm strips - Roll of 1,000
1169666	13 x 30mm strips - Roll of 1,000
1169668	9.5mm diameter dots - Roll of 5,000

## TUBEES HAZARD WARNING LABELS

A choice of hazard labels for use on microtubes and other small vials, designed for quick identification within the lab.

Pressure sensitive permanent adhesive, for use between -196°C and +100°C

Supplied in dispenser boxes of 500 labels. Roll has 2 labels per row.

1158123	Biohazard labels - Pack of 500
1158122	Radioactive labels - Pack of 500
1158121	Corrosive labels - Pack of 500
1158120	Freeze labels - Pack of 500
1158140	Toxic labels - Pack of 500



# CAMLAB

# SAFEGUARD HOODED COVERALL

Ideal for use in cleanroom/laboratories where the micro-porous laminate provides strength with excellent comfort.

- Repellent to water based liquids and low hazard chemicals.
- The soft texture ensures high wearer comfort for extended periods.
- Ideal for use when dry particulates are present.
- Good water vapour transmission rate and excellent blood barrier properties.
- Attached hood, elasticated wrists and ankles.
- SafeGard Economy garments are an economical version of SafeGard SMS and offer similar protection.

• These coveralls are suitable for use in work environments where hazardous or non-hazardous contaminants may be present.

• With a fabric weight of 45 grams they are lighter and offer better breathability and increased comfort.

#### ORDERING INFORMATION

1137988	SafeGaurd Coverall Hooded Medium	
1137989	SafeGaurd Coverall Hooded Large	
1137990	SafeGaurd Coverall Hooded Extra Large	
1137991	SafeGaurd Coverall Hooded X-Extra Large	

ECONOMY VISITOR COAT



# Excellent value for money Tyvek visitor coat, providing strength and comfort. 5 snapper closures, 1 Provide light-weight inherent barrier protection against hazardous dry particles and aerosols, and

Tyvek is a unique and versatile material invented and exclusively manufactured by DuPont. Ideal for protective clothing it is tough but extremely light and soft.

It is permeable to air and water vapour but repels water-based liquids and aerosols and acts as an excellent barrier against fine particles and fibres. It is ultra-low-linting and antistatically treated.

## ORDERING INFORMATION

breast pocket and 2 hip pockets.

nonhazardous light liquid splash.

1137992	Economy Visitor Coat Medium
1137993	Economy Visitor Coat Large
1137994	Economy Visitor Coat Extra Large

## UNCORDED FOAM EAR PLUGS

Designed to provide the ultimate in comfort and protection. Excellent levels of protection - SNR36.

Soft, comfortable finish for day long use. Tapered end for comfort. Slow expanding polyurethane foam. Fits majority of ear canals. Compatible with other PPE.

CE approved to EN352-2

ORDERING INFORMATION

1178435 Uncorded Foam Ear Plugs Box of 200



# CAMLAB



## SAFETY SPECTACLES



1178451	Comet Clear Safety Spectacles Ultra Lightweight Anti-Scratch
1180550	Cosmos Contoured Safety Spectacles Clear Polycarbonate Lens
1178419	Ecostar Anti-Scratch Safety Spectacles Clear Polycarbonate Lens
1178905	Solar Clear Safety Spectacles - Sporty 2-Tone Burgundy & Black Frame
1196235	Vesta Safety Spectacles Clear Lens
1180552	Zodiac Smoke Grey Sports Style Safety Spectacles
1173407	Ultranova Anti-Scratch/Mist Safety Goggle Eye Protector

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# SEROLOGICAL PIPETTES

Manufactured in virgin grade polystyrene to stringent quality specifications.

All pipettes have clear black printed graduations for maximum clarity.

Available in individually wrapped or bulk packed configurations

## ORDERING INFORMATION

1170824	1 ml serological pipette individually wrapped sterile paper/plastic peel pack of 500
1170830	1 ml serological pipette sterile inner plastic bag of 25 Case of 1000 pipettes
1170825	2 ml sterile serological pipette individually wrapped sterile paper/plastic peel pack of 500
1170831	2 ml serological pipette sterile inner plastic bag of 25 Case of 1000 pipettes
1170826	5 ml serological pipette individually wrapped sterile paper/plastic peel pack of 250
1170832	5 ml serological pipette sterile inner plastic bag of 25 Case of 375 pipettes
1170827	10ml serological pipette individually wrapped sterile paper/plastic peel pack of 200
1170833	10 ml serological pipette sterile inner plastic bag of 25 Case of 250 pipettes
1170828	25 ml serological pipette individually wrapped sterile paper/plastic peel pack of 100





Camlab Ltd, Norman Way Industrial Estate, Over, Cambridge. CB24 5WE Telephone: +44 (0)1954 233110 • Fax: +44 (0)1954 233101 • Email: sales@camlab.co.uk • www.camlab.co.uk

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