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 Астрахань (8512)99-46-04
 Барнаул (3852)73-04-42
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 Курск (4712)77-13-04
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 Липецк (4742)52-20-81

Киргизия (996)312-96-26-47

Магнитогорск (4219)55-03-13
 Москва (495)268-04-70
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 Псков (8112)59-10-37

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 Чита (3035)38-34-83
 Якутск (4112)23-90-97
 Ярославль (4422)69-52-93

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Laboratory Glassware

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Scharlau has been in the scientific glassware business for over 15 years

Until now Scharlab S.L. had limited its sales to the Spanish market. However, now, coinciding with the inauguration of the new workshop next to our warehouse in Sentmenat, we are ready to export our scientific glassware to other countries.

Standard and made to order

Products for which there is regular demand are produced in larger quantities and then stocked for almost immediate supply. Other products are either manufactured directly from glass tubing or are constructed from a number of semi-finished products.

Quality

Even today, scientific glassblowing remains a highly skilled hand craft and the quality of glassware depends on the skill of each blower. Careful selection of the raw glass ensures that our final products are free from imperfections such as air lines, scratches and stones. You will be able to judge for yourself the workmanship of our glassware products.

Safety

All our glassware is annealed and made stress free to avoid breakage.



Glassware

Scharlau glassware is made from borosilicate glass that meets the specifications of the following standards:

BS ISO 3585, DIN 12217	Type 3.3 Borosilicate glass
ASTM E-438	Type 1 Class A Borosilicate glass
US Pharmacopoeia	Type 1 Borosilicate glass
European Pharmacopoeia	Type 1 Glass

The typical chemical composition of our borosilicate glass is as follows:

SiO ₂	81%
B ₂ O ₃	13%
Na ₂ O	4%
Al ₂ O ₃	2%

Glass is an inorganic substance that on cooling becomes rigid without crystallising and therefore it has no melting point as such.

There are 4 temperatures worth noting:

• The working point

The temperature at which glass reaches a viscosity of 10⁴ poise. At this temperature glass is soft enough for most lamp-working or sealing tasks. Borosilicate reaches this state at 1252°C.

• The softening point

The temperature at which glass reaches a viscosity of 10^{7.6} poise. Borosilicate reaches this state at 821°C.

• The annealing point

The temperature at which the internal stress caused by rapid cooling (within 15min) from Working Point temperatures is safely relieved. Borosilicate reaches this state at 565°C.

• The strain point

The temperature at which the internal stress in a glass is substantially relieved only after several hours. Borosilicate reaches this state at 510°C.

Chemical resistance

Borosilicate glass is resistant to attack from water, acids, halogens and organic solvents. It has moderate resistance to alkaline solutions and is not resistant to hydrofluoric acid, hot concentrated phosphoric acid nor strong alkaline solutions.



Safe handling of glassware

- Wear protective clothing such as cut resistant gloves, eye protection, aprons, lab coats when manipulating and working with laboratory glassware
- Do not use chipped or broken glassware as you may get cut. Such glassware also breaks more easily.
- Use safety shields, nets or coatings to prevent broken glass from hitting you.
- Check all glassware for damage as even small cracks, chips or scratches affect the strength of the glassware.
- Never heat damaged glassware as resistance to heat is equally compromised.
- Use wire gauze when heating with an open flame or use only up to a medium heat when using a hot plate.
- Heat up and cool down glassware as slowly as possible even when using Borosilicate glass which has a very low coefficient of expansion. Maximum working temperature for Borosilicate glass is 500°C however special precautions must be employed even when working above 150°C.
- Do not heat extra thick glassware. This glassware is ideal for working under vacuum when higher mechanical strength is required, but this glass is less heat resistant.
- Do not subject ordinary, thin walled, laboratory glassware to pressure or vacuum.
- Lift glassware by the body and not by the more fragile rims or side arms.
- When heating glass bottles, loosen the caps.
- Be careful when sliding tubing over sidearms. Always use protective gloves.
- Never pipette by mouth. You may get intoxicated, burn your mouth or cut your lip.
- Do not use excessive force and wear protective gloves when trying to free stuck jointed glassware. Use only gentle tapping or rocking of the two sides of the joints. The use of threaded safety joints prevents joints from getting stuck.
- Do not leave pipettes or glass-rods sticking out of beakers, bottles or flasks.
- Do not heat glassware to over 420°C. This will cause stresses in the glassware that will eventually cause it to break.



Cleaning of glassware

• General

The cleaning procedure for glassware depends on the type of material contained in it.

Borosilicate glass has excellent resistance to most acids except hydrofluoric acid. Strong alkaline solutions will also attack the glass, which is why detergents should be diluted up to no more than 2% strength. Avoid exposure to detergents for long periods and avoid the same drying on the glass.

- Glassware should be cleaned as soon as possible to prevent the residues from hardening.
- Ideally give glassware a rinse or soak with organic solvent to remove grease and then another thorough rinse with water.
- Cleaning can be done in a glass washing machine or manually.

• Washing machine



Choose from the wide variety of detergent formulations offered by laboratory specialists for washing machines, depending on the residues you need to eliminate. These formulations are optimised for typical laboratory residues.

Check that the support racks and pins are well coated with a nonabrasive material to prevent the glass from being scratched or broken by a hard surface.

• Manual wash



Use only soft sponges or other soft clothes or plastic core brushes with non-abrasive bristles.

Choose from the wide variety of detergent formulations offered by laboratory specialists for manual washing, depending on the residues you need to eliminate. These formulations are optimised for typical laboratory residues.

• Specialised cleaning methods

- 1. Permanganate stains.** Use a mixture of equal volume 3% sulphuric acid and 3% hydrogen peroxide.
- 2. Iron stains.** Use a solution containing equal parts of hydrochloric acid and water.
- 3. Bacteriological material.** Glassware should be soaked in a disinfectant solution or steam autoclaved. After that clean with a detergent.

• Special precautions during the cleaning process:

- Do not use any abrasive sponges as used in kitchens for cleaning pots.
- Avoid any detergents or cleaning solutions that contain abrasive particles.
- Remove any hard objects like metal spatulas, stirring rods or brushes immediately. They can break the glass or scratch it.
- Strong alkaline domestic or industrial detergents will dissolve the glass and eventually cause breakage.
- Remove any kind of metal jewellery as well as rings with stones if you plan to introduce your hand inside glassware.

Volumetric glassware

• Volumetric glassware requires additional precautions during cleaning and handling:

- With volumetric glassware one has to ensure reproducibility. This is why perfect wetting has to be achieved in order not to distort the meniscus and not to affect the volume of liquid of any volumetric glassware calibrated to deliver.
- Therefore cleaning has to be done in such a way as to eliminate organic substances, especially grease, that may not allow a uniform wetting with distilled water.
- After the washing process glassware must be rinsed thoroughly with distilled water.
- If glassware is to be dried, as is the case with all flasks marked "to contain", ethanol or acetone can be used for rinsing.
- The drying process may be shortened by passing dry air through it. To ensure that the air is really clean and free from oil, the air compressor must be equipped with appropriate filters.

• Precautions:

- Never try to remove any dirt by applying direct heat. This may cause the calibration of the volumetric glassware to be altered.
- Use no abrasives on volumetric glassware as the scratches may become a place where dirt is deposited or they may prevent correct drainage of liquid.
- Use manual pipetting aids, but never your mouth, to fill containers with the cleaning solution.
- Graduated lines in blue or white colour which have been fused on the glass are quite resistant to alkalis and acids but are not as resistant as the glassware itself. Therefore avoid immersion in such solutions for a prolonged time.
- Pipette graduations coloured amber are as chemically resistant as the glassware itself, since in this case the glassware has been stained with the colour.



Care and handling of glassware



Ground-glass joints and glass stopcocks

If ground-glass joints are not lubricated they may "freeze".

Ground-joints must be carefully cleaned before lubrication to avoid any particles from scratching the surface and causing leakage.

Apiezon, **silicone-based**, and **fluoroether**-based greases can be used depending on the purpose:

- **Apiezon or similar hydrocarbon** based greases are cheap and suitable for high vacuum applications. Since they dissolve well in organic solvents the advantage is that the glass can be cleaned well with hexanes or pentane. The disadvantage however is that this lubricant may easily contaminate reaction mixtures.
- **Silicone**-based greases are relatively inert but contamination of reaction mixtures cannot be excluded completely. Soaking in a base bath is the best method to remove this lubricant as it is resistant to organic solvents.
- **Fluoroether**-based greases are the most inert of all and resistant to solvents, acids, bases, and oxidizers. The drawback is that they are quite expensive and not easily removed by cleaning.

Proper lubricating of ground joints is done by applying grease only on the upper part of the inner joint. The joint is properly lubricated if it appears clear and without striations.

In order to lubricate stopcocks, spread two circular bands of grease around the plug of the stopcock.

After having inserted the plug into the barrel and twisted several times, the assembly should be completely transparent. Avoid plugging the bore by using too much grease.

Stopcocks with PTFE Plugs (Polytetrafluoroethylene)

PTFE offers a number of advantages over glassware in the sense that it is very tough, heat resistant and durable. PTFE plugs do not “freeze” and hence do not require any lubricant that may cause contamination.



• PTFE properties

Properties	Advantages
• Extreme chemical resistance	• Withstands corrosive environments
	• Does not contaminate
• Insoluble	• No contamination in ultra-pure or corrosive applications
• High thermal stability	• Working temperatures from -200 to +300°C
	• Does not melt to a liquid phase - an in-built safety feature
• Exceptional electrical properties	• Extremely high electrical resistance
	• Low dielectric constant and dielectric loss factor
• Does not support tracking	• Exceptional anti-adhesion properties
• Lowest coefficient of friction of all solids	
• Other materials exhibit little or no adhesion to PTFE	
• Good flexural properties	
• Outstanding resistance to fatigue	
• No embrittlement in liquid helium	

• Here are some hints to obtain maximum performance:

- Before you start using a new plug, disassemble it, rinse the plug and barrel with acetone and then dry everything.
- The PTFE washer should always be placed adjacent to the end of the glass barrel to secure minimal friction. After tightening the plug it should turn only slightly harder than a lubricated glass plug. Solid particles can easily score the plug around the bore and the plug may leak.
- Do not use stopcocks with PTFE plugs on a vessel used for long time storage of liquids known to attack glass. The surface of the barrel may become roughened and leakage may occur.

FAQ

• What are the differences between Class A and Class B glassware?

Class A glassware provides the highest accuracy in Volumetric Glassware. It is permanently marked "A" and is guaranteed to comply with Class A volumetric tolerances defined in DIN EN ISO. It is also supplied with a serialized certificate of precision.

Volumetric glassware that is permanently marked "B" has volumetric tolerances twice those of Class A (with the exception of Graduated Cylinders). These tolerances comply with Class B tolerances as defined in DIN EN ISO.

- Touch off the last remaining drop on the inside surface of the receiver vessel two seconds after free-flow stops to break the surface tension and allow the remaining liquid to flow out.

• What is "serialized and certified" glassware?

Glassware defined as "serialized and certified" is permanently marked with its own serial number and supplied with a Certificate of Performance attesting to its conformance with DIN EN ISO Standards.

• What is the difference between "To contain" and "To deliver"?

All calibrated volumetric glassware requires that the user be informed whether the glassware is "To Contain" or "To Deliver" and is permanently marked "TC" (In) or "TD" (Ex). When the graduation line denotes the volume contained in the calibrated vessel, it is marked TC whereas when it is marked TD the graduation line indicates the volume delivered from the vessel. The TD glassware takes into account that some liquid is retained on the inner surface of the wall of the pipette and delivers the stated volume therefore. TD calibrated vessels are different from the TC calibrated vessels because of this drainage holdback error. The International Standards Organization designation for "To Contain" is "In" and the "To Deliver" is "Ex".

• How do I separate ground joints that have become frozen?

a) For glass-to-glass joints, immerse the joints in a glass container of freshly poured carbonated liquid. Let them soak in the solution for about 15 minutes while the liquid penetrates. Remove the joints, rinse with water and then wipe.

Wearing heat-resistant gloves gently heat the two joints by rotating them over a Bunsen burner flame for about 20 seconds. Make sure that at least 50% of the joints are wet before heating. After removing from the flame, gently twist the joints apart. If this does not work repeat the procedure. Never force the two joints apart when using this method.

b) For PTFE-to-glass connections, place the piece of glassware containing the PTFE part (stopcock, stopper, etc.) into an ice bath for about 15-20 minutes. This causes the PTFE to contract allowing the parts to be separated

• How do I clean fritted ware?

New

Fritted filters and fritted glassware should be washed by suction with hot hydrochloric acid and then rinsed with water before use. This treatment will remove loose particles of foreign matter such as dust.

Used

It is advisable to clean fritted glassware as soon as possible after use.

Remove all residues from the frit and dispose of these in appropriate waste containers.

Scrub off any remaining residue with a brush, taking care not to damage the frit. Clean the frit using appropriate solvents (water, acetone etc.) and vacuum filtration.

Precipitates can also be removed from the fritted glassware by rinsing from the reverse side with water under pressure not to exceed 1 BAR (15 PSI).

Soak the frit overnight in an appropriate cleaning solution. Always make sure that your cleaning solution is compatible with the chemical residues on your frit! Use vacuum filtration to wash the frit thoroughly with distilled water, dilute ammonium hydroxide (if you used acid) and distilled water.

• Is sodium hydroxide okay to use with burettes?

Yes, but not for prolonged periods and provided that the burette is cleaned immediately after each use preferably using distilled water. This is because Sodium Hydroxide can crystallize and clog the tip but it can also etch the surface of the glass causing inaccuracies in volume measurement. It is also better to use a PTFE stopcock when working with sodium hydroxide as this is more resistant to Sodium Hydroxide. Burettes must be properly handled when working with certain solutions, otherwise leakage problems will occur.

FAQ (continuation)

• What techniques are recommended for removing air bubbles that are left in the tip of a burette after filling?

The following techniques in general work well:

1. Rapidly open and close the stopcock while tapping the stopcock barrel with your finger.
2. Deflate a standard pipette bulb and insert it over the burette tip; simultaneously open the stopcock and release pressure on the bulb.

• What is the difference between Class A and Class AS pipettes?

Volumetric instruments of class A and AS have identical error limits as established by DIN EN ISO. For class AS volumetric instruments, calibrated to deliver (TD, Ex), the additional 'S' means swift delivery.

Delivery time

The delivery time is defined as the period of time required for the free fall of the meniscus (discharge of water due to gravity) from the upper volume mark to reach the lower volume mark or the tip. This is related to the defined waiting time for class AS volumetric instruments. In class AS pipettes the delivery time is much faster than in class A pipettes (see example below).

Waiting time

The waiting time is the time taken from when the meniscus comes to rest at the lower volume mark or in the tip, until the residual liquid has finished flowing down from the glass wall of the pipette into the vessel.

Waiting time for class AS: The waiting time for class AS bulb and graduated pipettes is 5s which is indicated on the pipette by the manufacturer. The pipette should not be removed from the receiving vessel until this time has elapsed starting from when the meniscus comes to rest in the tip/lower volume mark.

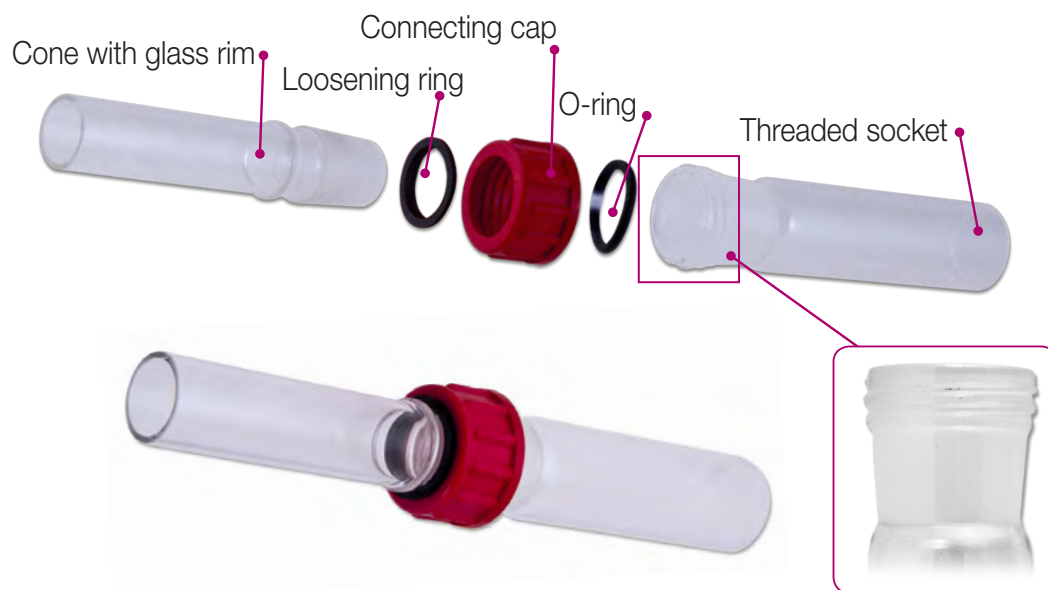
Class A pipettes have no waiting time and thus compensate for the slower delivery time.

The following are delivery and waiting times for different classes of 25 ml bulb pipettes:

Class A	Class AS
Delivery time: 25-50 s	Delivery time: 15-20 s
Waiting time: 0	Waiting time: 5 s

Threaded Glass Joints

Threaded joints offer a number of advantages vis-a-vis standard ground joints. They offer a safer connection, can be separated easily should they get jammed, are leakproof under vacuum or pressure, do not require the use of grease, can be used up to 200 °C and are interchangeable with standard joints. All this.... for only very little more money.



Safer connection:

Since threaded joints are secured by the cap, overall stability is improved and there is no need for the many clamps and supports required with conventional joints.

Easy separation:

The system has been designed in such a way that socket and cone can be separated without applying pressure, should they get jammed.

Leakproof:

The threaded cap and the O-ring provide for an airtight seal, which makes threaded joints ideal for applications where vacuum or pressure is involved.

Grease free:

This system guarantees a good seal without the need to apply grease on the inside of the ground joints. Therefore this threaded joint system is ideal for critical samples that may be contaminated by the grease.

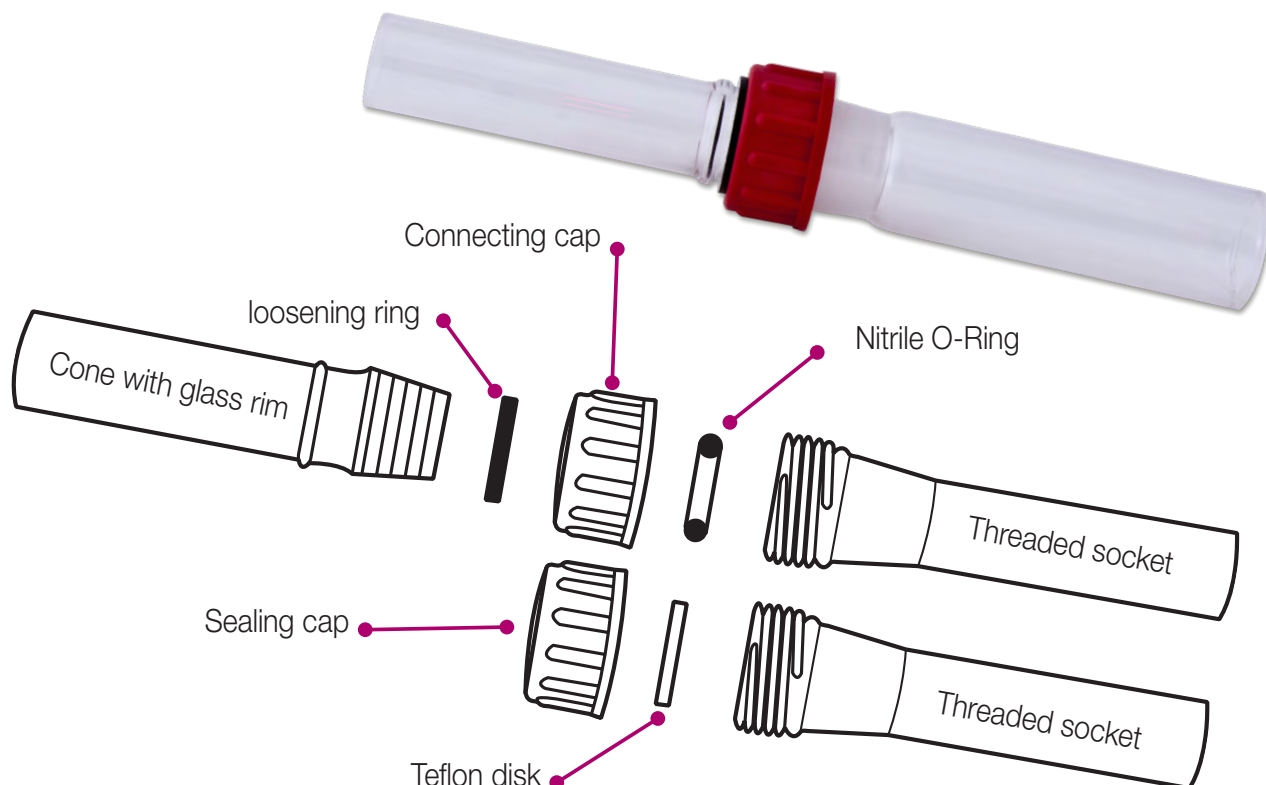
Interchangeable:

Both cone and socket joints are perfectly interchangeable with standard joints of same size. This means that you can mix and match with your existing glassware. Simply order from now on all glassware with threaded joints. We shall be glad to apply threaded joints to your existing glassware and the moment to do so is when you send any part to us for repair.

Sealing:

The screw on all sockets allows tight closure by means of our caps. All caps have a Teflon disk inside that insures tight and contamination free sealing.





• Ordering information:



Connecting cap

Art. No.	Joint size	Pack size
0028621500	14	10
0028621520	19	10
0028621530	24	10
0028621540	29	10
0028621570	45	10



Sealing cap (with PTFE disk)

Art. No.	Joint size	Pack size
0028621420	14	10
0028621430	19	10
0028621440	24	10
0028621450	29	10
0028621470	45	10



Nitrile O-Ring

Art. No.	Joint size	Pack size
0028621680	14	10
0028621700	19	10
0028621720	24	10
0028621740	29	10
0028621770	45	10



Loosening Ring

Art. No.	Joint size	Pack size
0028621640	14	10
0028621690	19	10
0028621710	24	10
0028621660	29	10
0028621670	45	10

Ground joint glassware

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Adapters

165° adapter socket/cone

Art. No.	Cone	Socket	Units
073-000694	29/32	29/32	1

90° socket/tubing adapter

Art. No.	Socket	Hose connection or olive (mm)	Units
073-000664	14/23	8	1
073-000665	19/26	8	1
073-000667	29/32	10	1
073-000668	45/40	12	1

Straight socket/tubing adapter

Art. No.	Socket	Hose connection or olive (mm)	Units
073-000654	14/23	8	1
073-000655	19/26	8	1
073-000657	29/32	10	1
073-000658	45/40	12	1

Straight socket/tubing adapter with glass key stopcock

Art. No.	Socket	Ø Bore (mm)	Units
073-000674	14/23	2/3	1
073-000675	19/26	4/5	1
073-000677	29/32	6/7	1
073-000678	29/32	7/8	1

90° cone/tubing adapter

Art. No.	Cone	Hose connection or olive (mm)	Units
073-000649	14/23	8	1
073-000650	19/26	8	1
073-000652	29/32	10	1
073-000653	45/40	12	1

Straight cone adapter for thermometers

Art. No.	Cone	Ø (mm)	Thread GL	Units
073-000619	14/23	5,5 to 7	GL14	1
073-000620	19/26	5,5 to 7	GL14	1
073-000622	29/32	7,5 to 9	GL18	1
073-000623	29/32	9,5 to 11	GL25	1
073-000624	45/40	11,5 to 13	GL25	1

Cone adapter for thermometers

Art. No.	Cone	Ø Internal guide	Units
073-001062	14/23	8	1
073-001063	29/32	10	1

Adapters (continuation)

Straight cone adapter with screw thread

Art. No.	Cone	Thread GL	Units
073-000626	14/23	GL14	1
073-000627	19/26	GL14	1
073-000629	29/32	GL18	1
073-000630	29/32	GL25	1
073-000631	45/40	GL25	1

Straight cone/tubing adapter

Art. No.	Cone	Hose connection or olive (mm)	Units
073-000639	14/23	8	1
073-000640	19/26	8	1
073-000642	29/32	10	1
073-000643	45/40	12	1

Straight cone/tubing adapter with glass key stopcock

Art. No.	Cone	Ø Bore (mm)	Units
073-000669	14/23	2/3	1
073-000670	19/26	4/5	1
073-000672	29/32	6/7	1
073-000673	29/32	7/8	1

75° adapter cone/cone

Art. No.	Cone	Units
073-000698	2 x 14/23	1
073-000699	2 x 29/32	1

105° adapter cone/socket

Art. No.	Cone	Socket	Units
073-000695	14/23	14/23	1
073-000696	29/32	29/32	1

Straight adapter cone/cup joint

Art. No.	Cone	Spherical Socket	Units
073-000611	14/23	19/09	1
073-000612	14/23	29/15	1
073-000613	29/32	35/21	1
073-000614	45/40	51/31	1

Straight adapter socket/ball joint

Art. No.	Socket	Spherical Cone	Units
073-000615	14/23	19/09	1
073-000616	14/23	29/15	1
073-000617	29/32	35/21	1
073-000618	45/40	51/31	1



Adapters

Adapters (continuation)

Straight reduction/expansion adapters cone/socket

Art. No.	Cone	Socket	Units
073-000585	14/23	19/26	1
073-000587	14/23	29/32	1
073-000591	19/26	29/32	1
073-000593	24/29	29/32	1
073-000596	29/32	45/40	1
073-000598	19/26	14/23	1
073-000600	29/32	14/23	1
073-000602	45/40	14/23	1
073-000604	29/32	19/26	1
073-000609	45/40	29/32	1
073-000610	55/44	45/40	1

Straight adapter cone/stirrer guide

Art. No.	Cone	Units
073-000405	19/26	1
073-000406	29/32	1

Splash head adapter, bent stem, Kjeldahl trap

Art. No.	Cone	Cone	Units
073-000258	29/32	R-29/15	1

Splash head adapter, straight stem, Kjeldahl trap

Art. No.	Cone	Socket	Units
073-000252	29/32	29/32	1
073-140252	14/23	14/23	1

Receiver adapter, bent, short

Art. No.	Socket	Units
073-000214	14/23	1
073-000215	29/32	1
073-000216	45/40	1

Receiver adapter, with stem and vacuum connection

Art. No.	Cone	Socket	Units
073-000206	14/23	14/23	1
073-000207	29/32	29/32	1

Collection tube with vacuum connection

Art. No.	Socket	Hose connection or olive (mm)	Units
073-000217	14/23	8	1
073-000218	29/32	10	1

Adapters (continuation)

Receiver adapter, vertical, with stem and vacuum connection

Art. No.	Cone	Socket	Units
073-000199	19/26	19/26	1
073-000200	14/23	14/23	1
073-000201	29/32	29/32	1

Pauly multiflask receiver adapter

Ideal for collecting fractions when distilling under vacuum. Different flasks can be filled progressively by rotation the adapter.

Art. No.	Cone	Socket	Units
073-000494	4x14/23	29/32	1

Pig receiver adapter for two flasks, with vacuum connection

Allows flasks to be connected to condenser outlet. Useful for collection distillation fractions to different flasks, which can be easily achieved by rotating the adapter.

Art. No.	Cone	Socket	Units
073-000490	2x14/23	14/23	1
073-000491	2x14/23	29/32	1

Pig receiver adapter for three flasks, with vacuum connection

Allows flasks to be connected to condenser outlet. Useful for collection distillation fractions to different flasks, which can be easily achieved by rotating the adapter.

Art. No.	Cone	Socket	Units
073-000492	3x14/23	14/23	1
073-000493	3x14/23	29/32	1

Receiver adapter, straight, with vacuum connection

Art. No.	Cone	Socket	Units
073-000197	14/23	14/23	1
073-000198	29/32	29/32	1

Still head with GL14 thread for thermometer

Art. No.	Cone	Cone	Thread GL	Units
073-000235	14/23	14/23	GL14	1
073-000236	29/32	29/32	GL14	1

Still head, plain

Used in distillation assemblies for connecting flasks to condenser.

Art. No.	Cone	Socket	Cone	Units
073-000229	14/23	14/23	14/23	1
073-000230	29/32	14/23	29/32	1
073-000231	29/32	29/32	29/32	1
073-000232	19/26	14/23	19/26	1



Adapters (continuation)

Adapter, 105° with two necks

Art. No.	Cone	Socket	Socket	Units
073-000240	14/23	14/23	14/23	1
073-000241	29/32	29/32	29/32	1

Parallel neck adapter

Art. No.	Cone	Central socket	Socket	Units
073-000219	14/23	14/23	14/23	1
073-000220	29/32	14/23	29/32	1
073-000221	29/32	29/32	29/32	1

Claisen still head

With additional socket for dropping funnel or stirrer.

Art. No.	Cone	Central socket	Socket	Units
073-000248	2-14/23	14/23	14/23	1
073-000249	2-19/26	14/23	19/26	1
073-000250	2-29/32	29/32	29/32	1

Vertical recovery still head

Used when condenser is assembled vertically.

Art. No.	Cone	Length (mm)	Units
073-000193	2-14/23	160	1
073-000194	2-29/32	235	1

Still head, plain, sloping

Art. No.	Cone	Socket	Cone	Units
073-000244	14/23	14/23	14/23	1
073-000245	29/32	14/23	29/32	1

Bottles

Cylindrical bottle with socket

Art. No.	Capacity (ml)	Socket	Units
073-000856	50	14/23	1
073-000857	100	14/23	1
073-000858	100	29/32	1
073-000859	250	14/23	1
073-000860	250	29/32	1
073-000861	500	29/32	1
073-000862	1000	29/32	1
073-000863	2000	29/32	1
073-000864	2000	45/40	1
073-000865	3000	45/40	1
073-000866	5000	45/40	1
073-000867	10000	45/40	1

Bottles (continuation)

Winkler bottle for chemical oxygen demand determination

Art. No.	Capacity (ml)	Units
073-000877	250	1
073-000878	300	1



Gas washing bottle (Drechsel bottle) 125 ml, with fritted cylinder (porosity no. 1)

The use of a sintered bulb improves the distribution of gas.

Art. No.	Description	Thread SVL	Units
073-000916	Complete		1
073-887SVL	Bottle 125 ml	SVL 30	1
073-917S/1	Head		1
073-701-43	Screw cap SVL 30	SVL 30	1
073-701-26	Sealing ring SVL 30		1

Gas washing bottle (Drechsel bottle) 250 ml, with fritted cylinder (porosity no. 1)

The use of a sintered bulb improves the distribution of gas.

Art. No.	Description	Thread SVL	Units
073-000918	Complete		1
073-890SVL	Bottle 250 ml	SVL 30	1
073-917S/2	Head		1
073-701-43	Screw cap SVL 30	SVL 30	1
073-701-26	Sealing ring SVL 30		1



Gas washing bottle (Drechsel bottle) 500 ml, with fritted cylinder (porosity no. 1)

The use of a sintered bulb improves the distribution of gas.

Art. No.	Description	Thread SVL	Units
073-000908	Complete		1
073-873SVL	Bottle 500 ml	SVL 30	1
073-000909	Head		1
073-701-43	Screw cap SVL 30	SVL 30	1
073-701-26	Sealing ring SVL 30		1

Gas washing bottle (Drechsel bottle) 125 ml

Art. No.	Description	Thread SVL	Units
073-000904	Complete		1
073-887SVL	Bottle 125 ml	SVL 30	1
073-000905	Head		1
073-701-43	Screw cap SVL 30	SVL 30	1
073-701-26	Sealing ring SVL 30		1

Gas washing bottle (Drechsel bottle) 250 ml

Art. No.	Description	Thread SVL	Units
073-000906	Complete		1
073-890SVL	Bottle 250 ml	SVL 30	1
073-000907	Head		1
073-701-43	Screw cap SVL 30	SVL 30	1
073-701-26	Sealing ring SVL 30		1



Bottles (continuation)



Gas washing bottle (Drechsel bottle) 125 ml, jointed glass connections

Art. No.	Description	Cone	Socket	Units
073-000886	Complete			1
073-000887	Gas washing bottle 125 ml		29/32	1
073-000888	Top adap.hose connection 10 mm Ø	29/32		1

Gas washing bottle (Drechsel bottle) 250 ml, jointed glass connections

Art. No.	Description	Socket	Units
073-000889	Complete		1
073-000890	Gas washing bottle 250 ml	29/32	1
073-000891	Top adap.hose connection 10 mm Ø	29/32	1

Gas washing bottle (Drechsel bottle) 500 ml, jointed glass connections

Art. No.	Description	Socket	Units
073-000892	Complete	29/32	1
073-000893	Gas washing bottle 500 ml		1
073-000894	Top adap.hose connection 10 mm Ø	29/32	1



Gas washing bottle (Muencke bottle) 100 ml, jointed glass connections

Art. No.	Description	Units
073-000936	Gas washing bottle acc. to Muencke 100 ml	1



Gas washing bottle, capacity 500 ml

Art. No.	Description	Cone	Socket	Units
073-000945	Complete			1
073-000048	Flat bottom flask 500 ml		29/32	1
073-000946	Washing bottle head	29/32		1

Gas washing bottle, capacity 1 l

Art. No.	Description	Cone	Socket	Units
073-000947	Complete			1
073-000049	Flat bottom flask 1 l		29/32	1
073-000948	Washing bottle head	29/32		1

Columns

Chromatography column with porosity 0 sintered disc PTFE key stopcock and socket

Art. No.	Effective length (mm)	Ø Disc (mm)	Cap. (ml)	Socket	Units
073-450701	200	10	15	14/23	1
073-450702	300	10	23	14/23	1
073-450703	200	15	35	14/23	1
073-450704	400	20	125	29/32	1
073-450705	400	30	150	29/32	1
073-450706	600	30	430	29/32	1

Chromatography column PTFE key stopcock and socket

Art. No.	Effective length (mm)	Ø Column (mm)	Cap. (ml)	Socket	Units
073-440701	200	10	15	14/23	1
073-440702	200	15	35	14/23	1
073-440704	400	20	125	29/32	1
073-440706	600	30	430	29/32	1

Chromatography column with porosity 0 sintered disc PTFE needle screwcock

Art. No.	Effective length (mm)	Ø Disc (mm)	Units
073-000554	200	10	1
073-000556	300	10	1
073-000557	300	15	1
073-000558	300	20	1
073-000559	400	25	1
073-000560	500	20	1

Chromatography column with porosity 0 sintered disc Glass key stopcock socket and cone

Art. No.	Effective length (mm)	Ø Internal (mm)	Ground joints	Units
073-000508	300	10	14/23	1
073-000509	300	15	14/23	1
073-000510	400	20	29/32	1
073-000511	400	25	29/32	1
073-000512	500	30	29/32	1



Columns

Columns (continuation)

Flash chromatography systems

Art. No.	Description	Ground joints	Units
073-104858	Flash chromatography system 25 x 300 complete. Consists of:		1
073-4858/1	Chromatography column 25 x 300 with PTFE needle screwcock	29/32	1
073-4858/2	500 ml solvent reservoir	29/32	1
073-4858/3	Cap with PTFE needle screwcock	29/32	1
073-104860	Flash chromatography system 47 x 500 complete. Consists of:		1
073-4860/1	Chromatography column 47 x 500 with PTFE needle screwcock	29/32	1
073-4860/2	1000 ml solvent reservoir	29/32	1
073-4858/3	Cap with PTFE needle screwcock	29/32	1

Fractionating columns, plain

Art. No.	Effective length (mm)	Ø Internal (mm)	Ground joints	Units
073-000501	100	20	14/23	1
073-000502	200	20	14/23	1
073-000503	250	30	29/32	1
073-000504	300	30	29/32	1
073-000505	400	30	29/32	1
073-000506	500	30	29/32	1
073-000507	600	30	29/32	1

Distilling columns, Snyder

Art. No.	Effective length (mm)	N° of plates	Ground joints	Units
073-000533	300	6	29/32	1
073-000534	500	10	29/32	1

Fractionating columns, Vigreux

Art. No.	Effective length (mm)	Ø Internal (mm)	Ground joints	Units
073-000525	200	20	14/23	1
073-000526	250*	16	14/23	1
073-000527	250	30	29/32	1
073-000528	300	30	29/32	1
073-000529	500	30	29/32	1
073-000530	600	30	29/32	1

*Jacketed.

Condensers

Allihn condenser with ground cone and socket

Art. No.	Cone	Socket	Length (mm)	Units
073-000446	14/23	14/23	200	1
073-000447	29/32	29/32	200	1
073-000449	29/32	29/32	300	1
073-000451	29/32	29/32	500	1

Liebig condenser with spherical joint for Kjeldahl assembly

Art. No.	Spherical Socket	Length (mm)	Units
073-000436	29/15	250	1

Air condenser with socket

Simple condensers for condensation of materials with boiling points above 150°C.

Art. No.	Socket	Effective length (mm)	Units
073-000413	14/23	500	1
073-000414	14/23	1000	1
073-000415	29/32	1000	1

Air condenser with cone

Simple condensers for condensation of materials with boiling points above 150°C.

Art. No.	Cone	Effective length (mm)	Units
073-000410	14/23	500	1
073-000411	14/23	1000	1
073-000412	29/32	1000	1

Liebig condenser for Dean-Stark equipment

Art. No.	Cone	Length (mm)	Units
073-000434	29/32	400	1



Condensers

Condensers (continuation)

Jacketed Coil Condenser (Dimroth), with ground socket and cone

Has an outer water jacket:

- Coil provides large cooling surface
- Jacket avoids vapour creeping around the coil

Art. No.	Cone	Socket	Effective length (mm)	Units
073-000481	29/32	29/32	300	1

Coil condenser (Dimroth) for soxhlet extraction, with ground cone

Art. No.	Cone	Effective length (mm)	Units
073-000478	29/32	150	1
073-000479	45/40	200	1
073-000480	55/50	200	1

Coil condenser (Dimroth), with ground socket and cone

Dimroth condensers are more effective than Graham coil condensers. They are often found in rotary evaporators.

Art. No.	Cone	Socket	Effective length (mm)	Units
073-000473	14/23	14/23	150	1
073-000474	14/23	14/23	200	1
073-000475	29/32	29/32	200	1
073-000476	29/32	29/32	250	1
073-000477	29/32	29/32	300	1
073-0162/4	29/32	29/32	400	1

Coil condenser (Graham), with ground socket and cone

Suitable for reflux or distillation applications. Efficient condenser with a large cooling surface.

Art. No.	Cone	Socket	Effective length (mm)	Units
073-000466	14/23	14/23	200	1
073-000467	14/23	14/23	250	1
073-000468	14/23	14/23	300	1
073-000469	29/32	29/32	300	1
073-00469R	14/23	29/15	300	1

Liebig condenser, with ground socket and cone

Water-jacketed condenser suitable for distillation and reflux applications.

Art. No.	Cone	Socket	Effective length (mm)	Units
073-000425	14/23	14/23	120	1
073-000426	14/23	14/23	200	1
073-000427	14/23	14/23	250	1
073-000428	14/23	14/23	300	1
073-000429	29/32	29/32	250	1
073-000430	29/32	29/32	300	1
073-000431	29/32	29/32	400	1
073-000432	29/32	29/32	500	1
073-000433	29/32	29/32	600	1

Filtration

Microfiltration assembly, 47 mm, with support

Designed to handle 500 ml of sample for the analysis of particulate or microbiological contamination. Graduated funnel. Fits into 1 l filtration flask.

Art. No.	Description	Units
073-001119	Complete	1
073-001120	Fritted filter support base, 47 mm	1
073-001121	Glass funnel support 250 ml	1
073-Q279-5	Metallic clamp	1
3661004708	Neoprene stopper no. 8 for 1 l filtration flask	1

Microfiltration assembly, 25 mm, with support

Designed to handle 100 ml of sample for the analysis of particulate or microbiological contamination. Graduated funnel. Fits into 250 ml filtration flask.

Art. No.	Description	Units
073-0Q7724	Complete	1
073Q2484/2	Filter support 25mm Ø	1
073Q7729/1	Funnel support 60 ml	1
073Q2484/4	Metallic clamp	1
3661002508	Neoprene stopper no. 5 for 250 ml filtration flask	1

Microfiltration apparatus, 47 mm, all-glass

Recommended for HPLC solvents filtration and microfiltration of corrosive liquids. Ground joint connection eliminates phthalates contamination of rubber stopper.

Art. No.	Description	Cone	Socket	Units
073-001123	Complete			1
073-001124	Fritted Filter support base, 47 mm		40/38	1
073-001121	Funnel support 250 ml			1
073-001125	Filtering flask 1 l	40/38		1
073-Q279-5	Metallic clamp			1

Buchner filters, with cone joint 29/32

Art. No.	Capacity (ml)	Ø disc (mm)	Cone	Units
073-1126--*	30	30	29/32	1
073-1128--*	60	40	29/32	1
073-1130--*	140	65	29/32	1
073-1132--*	450	90	29/32	1

*Indicate the porosity of disc (0,1,2,3 or 4) in your order"



Filtration



Filtration (continuation)

HPLC solvent filtration apparatus 47 mm, GL 45

Allows direct filtration from the original HPLC bottle thanks to the PTFE tubing attached to the filtration unit. Only glass and PTFE are in contact with the solvent. 2,5 l or 4 l reservoir allows filtration of complete solvent bottle content. Filtration unit is then exchanged by 2-hole HPLC Mobile Phase Cap. This cap allows connection of tubing for solvent extraction and degassing. The conical bottom reservoir allows delivery of virtually all the solvent without dangerous tilting of the bottle.

Art. No.	Description	Units
073-Q279-1	Top adapter, with hose connection and straight stopcock	1
073-Q279-2	Fritted filter support base with socket 40/38	1
073Q279-3A	Reservoir 2500 ml amber conical bottom	1
073Q279-6A	Reservoir 4000 ml amber conical bottom	1
073-Q279-4	Adapter conical joint 40/38 for reservoir	1
073-Q279-5	Metallic clamp	1

0000945T-2	T-series cap for GL45 bottle 2 lines	1
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Once filtration has been done, apply this cap to the reservoir to connect tubings with HPLC pump



HPLC solvent filtration apparatus, 47 mm, all-glass

Recommended for HPLC solvents filtration. Ground joint connection eliminates phthalates contamination of rubber stopper. Allows direct filtration from the original HPLC bottle thanks to the PTFE tubing attached to the filtration unit.

Art. No.	Description	Units
073-SS1001	Apparatus complete	1
073-OTF001	Top adapter with hose connection	1
073-SS1003	Funnel with socket 29/32	1
073-001124	Filter support with socket 40/38	1
073-001125	Filtering flask 1000 ml socket 40/38	1
073-1125/2	Filtering flask 2000 ml cone 40/38	1

Filtering flask with glass hose connection

Manufactured from heavy wall borosilicate glass to guarantee the necessary strength for vacuum filtration.

Art. No.	Capacity (ml)	Ø Neck (mm)	Units
0033768101	100	24	1
0033768102	250	35	1
0033768103	500	35	1
0033768104	1000	45	1
1033768101	100	24	10
1033768102	250	35	10
1033768103	500	35	10
1033768104	1.000	45	10



Flasks

Erlenmeyer flask with joint

Art. No.	Socket	Capacity (ml)	Units
073-000134	14/23	25	1
073-000135	14/23	50	1
073-013529	29/32	50	1
073-000136	14/23	100	1
073-000137	19/26	100	1
073-000138	29/32	100	1
073-000139	14/23	250	1
073-000140	29/32	250	1
073-000142	29/32	500	1
073-000144	29/32	1000	1
073-100134	14/23	25	10
073-100135	14/23	50	10
073-113529	29/32	50	10
073-100136	14/23	100	10
073-100137	19/26	100	10
073-100138	29/32	100	10
073-100139	14/23	250	10
073-100140	29/32	250	10
073-100142	29/32	500	10
073-100144	29/32	1000	10



Erlenmeyer flask available in amber color.
Please substitute dash for A in our article number.

Erlenmeyer flask, with threaded joints

Art. No.	Capacity (ml)	Ø External (mm)	Height (mm)	Socket	Units
073S000136	100	65	108	14/23	1
073S000138	100	65	107	29/32	1
073S000140	250	85	136	29/32	1
073S000142	500	100	180	29/32	1
073S100136	100	65	108	14/23	10
073S100138	100	65	107	29/32	10
073S100140	250	85	136	29/32	10
073S100142	500	100	180	29/32	10



Flasks

Erlenmeyer flask, screw cap, with capacity scale

Ideal for mixing and storing culture media.

Art. No.	Thread SVL	Capacity (ml)	Units
073-000150	22	25	1
073-000151	22	50	1
073-000152	30	100	1
073-000153	42	250	1
073-000154	42	500	1
073-000155	30	1000	1
073-000156	42	1000	1



Filtrating flask, heavy wall, side tubulation, taper joint

Designed to take 1 atm of vacuum. Made with a thicker wall than standard Erlenmeyer flasks.

Art. No.	Socket	Capacity (ml)	Units
073-000161	29/32	100	1
073-000162	29/32	250	1
073-000163	29/32	500	1
073-000164	29/32	1000	1
073-000165	29/32	2000	1



Flasks (continuation)

Boiling flask, round bottom, short neck, joint



Art. No.	Socket	Capacity (ml)	Units
073-000002	14/23	10	1
073-000003	14/23	25	1
073-000004	14/23	50	1
073-000005	14/23	100	1
073-000006	29/32	100	1
073-000007	14/23	250	1
073-000008	29/32	250	1
073-000009	29/32	500	1
073-000010	29/32	1000	1
073-100002	14/23	10	10
073-100003	14/23	25	10
073-100004	14/23	50	10
073-100005	14/23	100	10
073-100006	29/32	100	10
073-100007	14/23	250	10
073-100008	29/32	250	10
073-100009	29/32	500	10
073-100010	29/32	1000	10

Boiling Flask, round bottom, short neck, joint, amber



Art. No.	Socket	Capacity (ml)	Units
073A000004	14/23	50	1
073A000005	14/23	100	1
073A000006	29/32	100	1
073A000007	14/23	250	1
073A000008	29/32	250	1
073A000009	29/32	500	1
073A000010	29/32	1000	1
073A100004	14/23	50	10
073A100005	14/23	100	10
073A100006	29/32	100	10
073A100007	14/23	250	10
073A100008	29/32	250	10
073A100009	29/32	500	10
073A100010	29/32	1000	10

Boiling flask, round bottom, with threaded joints



Art. No.	Capacity (ml)	Ø External (mm)	Height (mm)	Socket	Units
073S000005	100	65	103	14/23	1
073S000006	100	65	113	29/32	1
073S000008	250	85	133	29/32	1
073S000009	500	105	152	29/32	1
073S100005	100	65	103	14/23	10
073S100006	100	65	113	29/32	10
073S100008	250	85	133	29/32	10
073S100009	500	105	152	29/32	10

Boiling flask, round bottom, long neck, joint

Art. No.	Socket	Capacity (ml)	Units
073-000032	14/23	100	1
073-000033	29/32	250	1
073-000034	29/32	500	1
073-000035	29/32	1000	1

Flasks (continuation)

Round bottom flask with two necks, centre neck and one angled side neck, taper joints

Art. No.	Socket	Socket r.	Capacity (ml)	Units
073-000068	14/23	14/23	100	1
073-000069	29/32	14/23	100	1
073-000070	14/23	14/23	250	1
073-000071	29/32	14/23	250	1
073-000072	29/32	14/23	500	1
073-000073	29/32	14/23	1000	1
073-000074	29/32	29/32	1000	1
073-000075	29/32	14/23	2000	1
073-000076	29/32	29/32	2000	1



Round bottom flask with three necks, centre neck and two angled side necks, taper joints

Art. No.	Socket l.	Socket c.	Socket r.	Cap. (ml)	Units
073-311128	14/23	14/23	14/23	50	1
073-311137	14/23	14/23	14/23	100	1
073-314137	14/23	29/32	14/23	100	1
073-314149	14/23	29/32	14/23	250	1
073-314158	14/23	29/32	14/23	500	1
073-314470	29/32	29/32	29/32	1000	1
073-314414	29/32	29/32	14/23	1000	1
073-314473	29/32	29/32	29/32	2000	1
073-314485	29/32	29/32	29/32	6000	1



Round bottom flask with three necks, centre neck and two parallel side necks, taper joints

Art. No.	Socket l.	Socket c.	Socket r.	Cap. (ml)	Units
073-000091	14/23	14/23	14/23	250	1
073-000092	14/23	14/23	14/23	500	1
073-000093	29/32	14/23	14/23	1000	1
073-000094	29/32	29/32	29/32	2000	1



Round bottom flask with three necks, centre neck and one angled side neck and one parallel side neck, taper joints

Art. No.	Socket l.	Socket c.	Socket r.	Cap. (ml)	Units
073-000100	14/23	29/32	29/32	500	1
073-000101	14/23	29/32	29/32	1000	1
073-000102	29/32	29/32	29/32	1000	1
073-000103	29/32	29/32	29/32	2000	1



Flat bottom flask, short neck and joint

Art. No.	Socket	Capacity (ml)	Units
073-000036	14/23	50	1
073-000037	14/23	100	1
073-000038	19/26	100	1
073-000039	29/32	100	1
073-000040	14/23	250	1
073-000041	19/26	250	1
073-000042	29/32	250	1
073-000043	29/32	500	1
073-000044	29/32	1000	1
073-100036	14/23	50	10
073-100037	14/23	100	10
073-100038	19/26	100	10
073-100039	29/32	100	10
073-100040	14/23	250	10
073-100041	19/26	250	10
073-100042	29/32	250	10
073-100043	29/32	500	10
073-100044	29/32	1000	10



Flasks (continuation)



Boiling flask, flat bottom, with threaded joints

Art. No.	Capacity (ml)	Ø External (mm)	Height (mm)	Socket	Units
073S000037	100	65	105	14/23	1
073S000039	100	65	105	29/32	1
073S000042	250	85	125	29/32	1
073S000043	500	105	145	29/32	1
073S100037	100	65	105	14/23	10
073S100039	100	65	105	29/32	10
073S100042	250	85	125	29/32	10
073S100043	500	105	145	29/32	10



Boiling flask, flat bottom, long neck, joint

Art. No.	Socket	Capacity (ml)	Units
073-000047	29/32	250	1
073-000048	29/32	500	1



Pear shaped boiling flask, with single neck, taper joint

Art. No.	Socket	Capacity (ml)	Units
073-125005	14/23	5	1
073-125010	14/23	10	1
073-000125	14/23	25	1
073-000126	14/23	50	1
073-000127	14/23	100	1
073-000128	14/23	250	1
073-000129	29/32	250	1



Pear shaped boiling flask, with two necks, centre neck and one angled side neck, taper joints

Art. No.	Socket	Capacity (ml)	Units
073-000130	2x14/23	50	1
073-000131	2x14/23	100	1



Pear shaped boiling flask, with three necks, centre neck and one angled side neck and one parallel side neck, taper joints

Art. No.	Socket	Capacity (ml)	Units
073-000132	3x14/23	50	1
073-000133	3x14/23	100	1

Flasks (continuation)

Kjeldahl flask, long neck

Art. No.	Socket	Capacity (ml)	Units
073-000058	29/32	100	1
073-250059	29/32	250	1
073-000060	29/32	300	1
073-000061	29/32	500	1
073-000062	29/32	800	1
073-000063	29/32	1000	1



Schlenk flask, round bottom with glass stopcock

Art. No.	Socket	Capacity (ml)	Units
073-360122	14/23	25	1
073-360128	14/23	50	1
073-360137	14/23	100	1
073-360149	14/23	250	1
073-360428	29/32	50	1
073-360437	29/32	100	1
073-360449	29/32	250	1
073-360458	29/32	500	1
073-360470	29/32	1000	1



Schlenk tube, round bottom, with socket and glass stopcock

Art. No.	Socket	Capacity (ml)	Units
073-370113	14/23	10	1
073-370122	14/23	25	1
073-370128	14/23	50	1
073-370137	14/23	100	1
073-370149	14/23	250	1



Schlenk tube, round bottom, with cone and glass stopcock

Art. No.	Cone	Capacity (ml)	Units
073-370213	14/23	10	1
073-370222	14/23	25	1
073-370228	14/23	50	1
073-370237	14/23	100	1
073-370249	14/23	250	1



Iodine flask, cup shaped

Art. No.	Description	Cone	Socket	Units
073-000964	Complete			1
073-000965	Erlenmeyer flask 250 ml		29/32	1
073-000966	Top adapter	29/32		1





Funnels

Dropping funnel cylindrical - with equalising arm and PTFE stopcock

Art. No.	Capacity (ml)	Cone	Socket	Units
073-000373	50	14/23	14/23	1
073-000374	100	29/32	29/32	1
073-000375	250	29/32	29/32	1
073-000376	500	29/32	29/32	1

Dropping funnel cylindrical - with equalising arm and glass stopcock

Art. No.	Capacity (ml)	Cone	Socket	Units
073-000368	50	14/23	14/23	1
073-000369	100	29/32	29/32	1
073-000370	250	29/32	29/32	1
073-000371	500	29/32	29/32	1

Graduated dropping funnel cylindrical - with equalising arm and PTFE stopcock

Art. No.	Capacity (ml)	Cone	Socket	Units
073-00364G	50	14/23	14/23	1
073-00365G	100	29/32	29/32	1
073-00366G	250	29/32	29/32	1
073-00367G	500	29/32	29/32	1

Graduated dropping funnel cylindrical - with glass stopcock

Art. No.	Capacity (ml)	Cone	Socket	Units
073-000344	25	14/23	14/23	1
073-000345	50	19/26	19/26	1
073-000337	50	14/23	14/23	1
073-000346	100	29/32	29/32	1
073-000347	250	29/32	29/32	1
073-000341	500	29/32	29/32	1

Graduated dropping funnel cylindrical - with PTFE stopcock

Art. No.	Capacity (ml)	Cone	Socket	Units
073-344PTF	25	14/23	14/23	1
073-345PTF	50	19/26	19/26	1
073-337PTF	50	14/23	14/23	1
073-346PTF	100	29/32	29/32	1
073-347PTF	250	29/32	29/32	1
073-341PTF	500	29/32	29/32	1

Separating funnel, conical, with PTFE needle screwcock, taper joint

Art. No.	Capacity (ml)	Cone	Socket	Units
073-000318	50	14/23	14/23	1
073-000319	100	14/23	14/23	1
073-000320	250	29/32	29/32	1
073-000321	500	29/32	29/32	1
073-000322	1000	29/32	29/32	1

Funnels (continuation)

Separating funnel, conical, with PTFE stopcock, taper joint

Art. No.	Capacity (ml)	Cone	Socket	Units
073-000323	50	14/23	14/23	1
073-000324	100	14/23	14/23	1
073-000325	250	29/32	29/32	1
073-000326	500	29/32	29/32	1
073-000327	1000	29/32	29/32	1

Separating funnel, conical, with glass stopcock, taper joint

Art. No.	Capacity (ml)	Cone	Socket	Units
073-000301	50	14/23	14/23	1
073-000302	100	14/23	14/23	1
073-000303	250	29/32	29/32	1
073-000304	500	29/32	29/32	1
073-000305	1000	29/32	29/32	1

Separating funnel, conical, with PTFE stopcock

Art. No.	Capacity (ml)	Socket	Units
073-000313	50	14/23	1
073-000314	100	19/26	1
073-000315	250	29/32	1
073-000316	500	29/32	1
073-000317	1000	29/32	1

Separating funnel, conical, with glass stopcock

Art. No.	Capacity (ml)	Socket	Units
073-000294	50	19/26	1
073-000295	100	19/26	1
073-000296	125	14/23	1
073-000297	250	29/32	1
073-000298	500	29/32	1
073-000299	1000	29/32	1

Separating funnel, conical, with PTFE needle screwcock

Art. No.	Capacity (ml)	Socket	Units
073-000307	50	14/23	1
073-000308	100	14/23	1
	250	19/26	1
073-000310	500	29/32	1
073-000311	1000	29/32	1

Funnel with cone

Art. No.	Ø Funnel (mm)	Cone	Units
073-000282	50	14/23	1
073-000283	80	29/32	1
073-000284	100	29/32	1
073-000285	120	29/32	1



Funnels

Gas collecting tubes

Gas sampling tubes, 3-way double oblique bore glass stopcocks



Art. No.	Capacity (ml)	Thread GL	Units
073-000941	100	18	1
073-000942	250	18	1
073-000943	500	18	1
073-000944	1000	18	1

Gas collecting tubes, glass stopcocks



Art. No.	Capacity (ml)	Units
073-000937	100	1
073-000938	250	1
073-000939	500	1
073-000940	1000	1

Kjeldahl

Liebig condenser with spherical joint for Kjeldahl assembly



Art. No.	Spherical Socket	Length (mm)	Units
073-000436	29/15	250	1

Kjeldahl flask, long neck



Art. No.	Socket	Capacity (ml)	Units
073-000058	29/32	100	1
073-250059	29/32	250	1
073-000060	29/32	300	1
073-000061	29/32	500	1
073-000062	29/32	800	1
073-000063	29/32	1000	1

Digestion tube straight for Tecator Kjeldahl equipment



Art. No.	Dimensions (mm)	Cap. (ml)	Units
073-001362	42x300	250	1

Digestion tubes for Selecta Kjeldahl equipment, graduated



Art. No.	Dimensions (mm)	Capacity (ml)	Units
073-001360	26x300	100	1
073-001361	42x300	250	1

Digestion tube constricted with volume mark for Tecator equipment



Art. No.	Dimensions (mm)	Units
073-001358	42x300	1
073-001359	48x260	1

Reaction vessels

Reaction vessel, cylindrical, with flat flange and bottom PTFE stopcock

Art. No.	Capacity (ml)	Ø Joint (mm)	Units
073-000171	250	75	1
073-000172	500	75	1
073-000173	1000	100	1
073-000174	2000	100	1
073-000159	5000	100	1



Reaction vessel, cylindrical, with flat flange

Art. No.	Capacity (ml)	Ø Joint (mm)	Units
073-000167	250	75	1
073-000168	500	75	1
073-000169	1000	100	1
073-000170	2000	100	1
073-000158	5000	100	1



Reaction vessel, wide neck, with flat flange

Art. No.	Capacity (ml)	Ø Joint (mm)	Units
073-175250	250	75	1
073-175500	500	75	1
073-000175	1000	100	1
073-000176	2000	100	1
073-000177	4000	100	1
073-000178	6000	100	1
073-000179	10000	100	1
073-000180	20000	100	1



Lid for reaction vessel, three neck, flat flange, 75 mm

Art. No.	Central joint	Ground joints	Units
073-000187	19/26	3x14/23	1



Lids for reaction vessel, multi neck, flat flange, 100 mm

Art. No.	Socket	Socket	Units
073-000188	19/26	1x29/32 and 3x14/23	1
073-000189	29/32	1x29/32 and 3x14/23	1
073-000190	29/32	2x29/32 and 1x14/23	1



Reaction vessels

Rotary evaporators

Scharlau offers you the possibility to buy your replacement glassware for rotary evaporators in the same quality as the original manufacturer. Find below a selection of standard spare parts for different equipment brands. We can study the possibility to manufacture any other part on demand.

To guarantee smooth operation and long life of rotary evaporators, our glassware fulfils a number of requirements:

- All our glassware for rotary evaporators is made from borosilicate 3.3, which is one of the most inert glass compositions and has a very small expansion coefficient to resist thermal shocks of up to 180 °C. This makes our glassware perfectly suitable even for oil baths.
- Each piece is submitted to exactly defined temperature gradients in a furnace, to eliminate tensions in the glass.
- Uniform wall thickness, specially at the base of the flasks, increases mechanical and thermal resistance.
- To assure perfectly even running (turning) of the flasks and no vacuum-loss, our joints are perfectly centred. We offer different glassware for the various rotary evaporator brands to match the exact specifications of each brand.

Rotary evaporators



Glassware spare parts for Büchi rotary evaporators

Rotary evaporator flasks (pear-shaped)

Art. No.	Socket	Capacity (ml)	Equivalent to Büchi	Units
073-000053	NS 29/32	50	000431	1
073-000054	NS 29/32	100	000432	1
073-000055	NS 29/32	250	000433	1
073-000056	NS 29/32	500	000434	1
073-000057	NS 29/32	1000	000435	1
073-572000	NS 29/32	2000	000436	1



Rotary evaporator receiving flask, round bottom, with spherical joint

Art. No.	Socket	Capacity (ml)	Equivalent to Büchi	Units
073-000025	S 35/20	500	000424	1
073-000027	S 35/20	1000	000425	1
073-102000	S 35/20	2000	000426	1
073-103000	S 35/20	3000	000427	1



Vapor ducts for Büchi R-210/215

Art. No.	Cone	Equivalent to Büchi	Units
073-B00001	NS 24/29	046964	1



Pauly multiflask receiver adapter, complete with 5 flasks

For simultaneous distillation from 5 evaporating flasks with NS 24/29.

Art. No.	Cone	Socket	Capacity (ml)	Equivalent to Büchi	Units
073-BH0003	5 x NS 24/29	NS 29/32	50	001332	1
073-BH0004	5 x NS 24/29	NS 29/32	100	001333	1



Pauly multiflask receiver adapter for 5 flasks (without flasks)

Art. No.	Cone	Socket	Equivalent to Büchi	Units
073-BH0005	5 x NS 24/29	NS 29/32		1
073-BH0006	5 x NS 24/29	NS 29/32		1



Rotary evaporator flasks (pear-shaped) for Pauly multiflask receiver adapter

Art. No.	Socket	Capacity (ml)	Equivalent to Büchi	Units
073-BH0007	NS 24/29	50	000472	1
073-BH0008	NS 24/29	100	000473	1



Rotary evaporators



Multiflask receiver adapter for cylindrical flasks, complete with flasks

For simultaneous distillation from 20 ml cylindrical flasks.

Art. No.	Cone	Socket	Capacity (ml)	Equivalent to Büchi	Units
073-BH0009	6 x NS 14,5/23	NS 29/32	6 x 20	001334	1
073-BH0010	12 x NS 14,5/23	NS 29/32	12 x 20	001335	1
073-BH0011	20 x NS 14,5/23	NS 29/32	20 x 20	001336	1



Multiflask receiver adapter for cylindrical flasks (without flasks)

Art. No.	Cone	Socket	Equivalent to Büchi	Units
073-BH0012	6 x NS 14,5/23	NS 29/32		1
073-BH0013	12 x NS 14,5/23	NS 29/32		1
073-BH0014	20 x NS 14,5/23	NS 29/32		1



Cylindrical flasks for multiflask receiver adapter

Art. No.	Socket	Capacity (ml)	Equivalent to Büchi	Units
073-BH0015	NS 14,5/23	20	000477	1

Diagonal condenser A incl. GL 14 connection tube for Büchi R-210/215

Art. No.	Equivalent to Büchi	Units
073-B00019	046988	1



Vertical condenser V incl. GL 14 connection tube for Büchi R-200/205 and R-210/215

Art. No.	Equivalent to Büchi	Units
073-B00020	040601	1



Stopcock for Büchi R-200/205 and R-210/215

Art. No.	Cone	Equivalent to Büchi	Units
073-BH0021	NS 18,8/38	040627	1



Glassware spare parts for Heidolph rotary evaporators

Hei-VAP and Laborota series rotary evaporators use the same glassware components.

Rotary evaporator flasks (pear-shaped)

Art. No.	Socket	Capacity (ml)	Equivalent to Heidolph	Units
073-000054	NS 29/32	100	514-71000-00	1
073-000055	NS 29/32	250	514-72000-00	1
073-000056	NS 29/32	500	514-73000-00	1
073-000057	NS 29/32	1000	514-74000-00	1
073-572000	NS 29/32	2000	514-75000-00	1

Rotary evaporator receiving flask, round bottom, with spherical joint

Art. No.	Socket	Capacity (ml)	Equivalent to Heidolph	Units
073-000025	S 35/20	500	514-83000-00	1
073-000027	S 35/20	1000	514-84000-00	1
073-102000	S 35/20	2000	514-85000-00	1
073-103000	S 35/20	3000	514-86000-00	1

Vapor duct

Art. No.	Cone	Equivalent to Heidolph	Units
073-H00022	NS 29/32	514.00000.01	1

Pauly multiflask receiver adapter, complete with 5 flasks

For simultaneous distillation from 5 evaporating flasks with NS 24/29.

Art. No.	Cone	Socket	Capacity (ml)	Equivalent to Heidolph	Units
073-BH0003	5 x NS 24/29	NS 29/32	50	15-300-005-04	1
073-BH0004	5 x NS 24/29	NS 29/32	100	15-300-005-07	1

Pauly multiflask receiver adapter for 5 flasks (without flasks)

Art. No.	Cone	Socket	Equivalent to Heidolph	Units
073-BH0005	5 x NS 24/29	NS 29/32	doesn't exist	1
073-BH0006	5 x NS 24/29	NS 29/32	doesn't exist	1

Rotary evaporator flasks (pear-shaped) for Pauly multiflask receiver adapter

Art. No.	Socket	Capacity (ml)	Equivalent to Heidolph	Units
073-BH0007	NS 24/29	50	doesn't exist	1
073-BH0008	NS 24/29	100	doesn't exist	1



Rotary evaporators



Multiflask receiver adapter for cylindrical flasks, complete with flasks

For simultaneous distillation from 20 ml cylindrical flasks.

Art. No.	Cone	Socket	Capacity (ml)	Equivalent to Heidolph	Units
073-BH0009	6 x NS 14,5/23	NS 29/32	6 x 20	15-300-005-09	1
073-BH0010	12 x NS 14,5/23	NS 29/32	12 x 20	15-300-005-10	1
073-BH0011	20 x NS 14,5/23	NS 29/32	20 x 20	15-300-005-11	1



Multiflask receiver adapter for cylindrical flasks (without flasks)

Art. No.	Cone	Socket	Equivalent to Heidolph	Units
073-BH0012	6 x NS 14,5/23	NS 29/32	doesn't exist	1
073-BH0013	12 x NS 14,5/23	NS 29/32	doesn't exist	1
073-BH0014	20 x NS 14,5/23	NS 29/32	doesn't exist	1



Cylindrical flasks for multiflask receiver adapter

Art. No.	Socket	Capacity (ml)	Equivalent to Heidolph	Units
073-BH0015	NS 14,5/23	20	doesn't exist	1

Diagonal condenser for all Heidolph evaporator models (glassware set G1)

Art. No.	Equivalent to Heidolph	Units
073-H00033	514-00100-00	1

Vertical condenser for all Heidolph evaporator models (glassware set G3)

Art. No.	Equivalent to Heidolph	Units
073-H00034	514-00300-00	1

Vacuum fitting NS 29/32 with GL18 and lateral GL14

Art. No.	Equivalent to Heidolph	Units
073-H00044	514-00001-00	1

Closed cap for GL 18

Art. No.	Equivalent to Heidolph	Units
0222924011	23-09-03-01-24-0	10

Connecting cap GL 14 (cooling water and vacuum)

Art. No.	Equivalent to Heidolph	Units
0222922705	23-09-03-01-27-0	10

PP olive for GL 14

Art. No.	Equivalent to Heidolph	Units
0222925506	11-300-005-22-0	10

Stopcock for all Heidolph evaporator models (glassware sets G1, G3, G5, G6)

Art. No.	Cone	Equivalent to Heidolph	Units
073-BH0021	NS 18,8/38	514.51000.00	1

Soxhlet extractors

Filter crucible with sintered disk porosity 2 for Soxhlet

Art. No.	Description	Ø External x height (mm)	Capacity (ml)	Units
073-000733	Thimble 50 ml for Soxhlet extraction	24x70	20 ml	1
073-000734	Thimble 125 ml for Soxhlet extraction	40x90	75 ml	1
073-000735	Thimble 250 ml for Soxhlet extraction	44x130	170 ml	1



Soxhlet extractor 50 ml

Art. No.	Description	Cone	Socket	Units
073-000727	Complete			1
073-000728	Extractor body 50 ml	19/26	29/32	1
073-000478	Condenser Dimroth 150 mm height	29/32	14/23	1
073-000038	Flat bottom flask 100 ml		19/26	1

Soxhlet extractor 125 ml

Art. No.	Description	Cone	Socket	Units
073-000729	Complete			1
073-000730	Extractor body Soxhlet 125 ml	29/32	45/40	1
073-000479	Condenser Dimroth 200 mm height	45/40	14/23	1
073-000042	Flat bottom flask 250 ml		29/32	1

Soxhlet extractor 250 ml

Art. No.	Description	Cone	Socket	Units
073-000731	Complete			1
073-000732	Extractor body 250 ml	29/32	55/50	1
073-000480	Condenser Dimroth 200 mm height	55/50	14/23	1
073-000043	Flat bottom flask 500 ml		29/32	1

Soxhlet extractor 500 ml

Art. No.	Description	Cone	Socket	Units
073-731500	Complete			1
073-005732	Extractor body 500 ml	29/32	55/50	1
073-000480	Condenser Dimroth 200 mm height	55/50	14/23	1
073-000044	Flat bottom flask 1000 ml		29/32	1

Soxhlet extractor 2000 ml

Art. No.	Description	Cone	Socket	Units
073-000736	Complete			1
073-000737	Extractor body 2000 ml	45/40		1
073-000472	Cond. 2 spiral inner tubes 60 cm height	45/40	45/40	1
073-000016	Round bottom flask 4000 ml		45/40	1
073-000192	Clamp			1
073-000738	Lip, flat flange		45/40	1

Universal extractor

Art. No.	Description	Cone	Socket	Units
073-000745	Complete			1
073-000042	Flat bottom flask 250 ml		29/32	1
073-000479	Condenser Dimroth 200 mm height	45/40	14/23	1
073-000746	Central body	29/32	45/40	1
073-000747	Capsule 50 ml constant level			1
073-000748	Capsule 50 ml bottom outlet			1
073-000749	Capsule 50 ml with siphon			1
073-000750	Capsule 50 ml with diffuser funnel			1



Soxhlet extractors

Stirrers

Stirrer shaft with PTFE blade and polished shaft

Art. No.	Ø Rod (mm)	For joint	Units
073-000395*	6	19/26	1
073-000396*	10	29/32	1

*Indicate the length of rod in your order.

Stirrer shaft with glass blade

Art. No.	Ø Rod (mm)	For joint	Length (mm)	Units
073-000389	6	19/26	600	1
073-000390	10	29/32	600	1

Stirrer shaft with "anchor" glass blade and polished shaft

Art. No.	Ø Rod (mm)	For laboratory flange (mm)	Units
073-000393*	6	75	1
073-000394*	10	100	1

*Indicate the length of rod in your order.

Stirrer shaft with "anchor" glass blade

Art. No.	Ø Rod (mm)	For laboratory flange (mm)	Length (mm)	Units
073-000385	6	75	450	1
073-000386	6	100	600	1
073-000387	10	100	600	1
073-000388	10	100	700	1

Stopcocks

Glass stopcock with cone and socket

Art. No.	Socket	Cone	Ø Bore (mm)	Units
073-000260	14/23	14/23	2,5	1
073-000261	19/26	19/26	4	1
073-000262	29/32	29/32	6	1

Glass stopcock for aspirator bottles

Art. No.	Ø Bore (mm)	Ø External stem (mm)	Units
073-001010	2	8	1
073-001011	4	10	1
073-001012	6	12	1
073-001013	8	13	1
073-001014	10	14	1

Stopcocks (continuation)

Stopcock, straight bore, with hose connections

Art. No.	Ø Bore (mm)	Ø External stem (mm)	Length stem (mm)	Units
073-001006	2	8	60	1
073-001007	4	10	60	1
073-001008	6	10	70	1
073-001009	8	12	70	1



Stopcock, two way with solid glass plug

Art. No.	Ø Bore (mm)	Ø External stem (mm)	Units
073-001015	2	7	1
073-001016	4	9	1



Stopcock, two way with PTFE plug

Art. No.	Ø Bore (mm)	Ø External stem (mm)	Units
073-1015TF	2,5	7	1
073-1016TF	4	9	1



Stopcock, straight bore with solid glass plug

Art. No.	Ø Bore (mm)	Ø External stem (mm)	Length stem (mm)	Units
073-001001	2	8	70	1
073-001002	4	10	70	1
073-001003	6	12	100	1
073-001004	8	13	100	1
073-001005	10	14	110	1



Stopcock, straight bore with PTFE plug

Art. No.	Ø Bore (mm)	Ø External stem (mm)	Length stem (mm)	Units
073-1001TF	2	8	70	1
073-1002TF	4	10	90	1
073-1003TF	6	12	100	1
073-1004TF	8	13	100	1
073-1005TF	10	14	110	1



Stopcock, three way with hose connections

Art. No.	Ø Bore (mm)	Ø External olive (mm)	Units
073-001019	2	7	1
073-001020	4	10	1



Stopcock, three way with solid glass plug

Art. No.	Ø Bore (mm)	Ø External stem (mm)	Units
073-001017	2	7	1
073-001018	4	9	1



Stopcock, three way with PTFE plug

Art. No.	Ø Bore (mm)	Ø External stem (mm)	Units
073-1017TF	2	14,5	1
073-1018TF	4	24	1



Stopcocks



Stopcocks (continuation)

Stopcock, high vacuum, right angle, lower limb vertical, hollow glass plug

Art. No.	Ø Bore (mm)	Ø External olive (mm)	Units
073-001027	6	10	1
073-001028	8	12	1



Stopcock, high vacuum, right or left angle, lower limb vertical, hollow glass plug, with vacuum chamber

Art. No.	Ø Bore (mm)	Ø External olive (mm)	Units
073-001023	6	10	1
073-001024	8	12	1



Stopcock, high vacuum, right or left angle, lower limb vertical, hollow glass plug

Art. No.	Ø Bore (mm)	Ø External olive (mm)	Units
073-001025	6	10	1
073-001026	8	12	1



Stopcock, high vacuum, straight bore

Art. No.	Ø Bore (mm)	Ø External olive (mm)	Units
073-001033	5	8/9	1
073-001032	8	12/13	1



Stoppers

Glass stopper, bell shaped for Tecator tube

Art. No.	Units
073-001363	1



Stopper, cylindrical head, hollow cap style, socket

Art. No.	Socket	Units
073-001056	10/19	1
073-001057	12/21	1
073-001058	14/23	1
073-001059	19/26	1
073-001060	24/29	1
073-001061	29/32	1

Stoppers (continuation)

Stopper, hexagonal head, hollow, with drip tip

Art. No.	Cone	Units
073-007/16	7/16	1
073-001043	10/19	1
073-001044	12/21	1
073-001045	14/23	1
073-001046	19/26	1
073-001047	24/29	1
073-001048	29/32	1
073-001049	34/35	1
073-001050	45/40	1
073-107/16	7/16	10
073-101043	10/19	10
073-101044	12/21	10
073-101045	14/23	10
073-101046	19/26	10
073-101047	24/29	10
073-101048	29/32	10
073-101049	34/35	10
073-101050	45/40	10



Stopper, with air vent, hexagonal head, hollow, with drip tip

Recommended for separating funnels.

Art. No.	Cone	Units
073-001051	14/23	1
073-001052	19/26	1
073-001053	24/29	1
073-001054	29/32	1
073-001055	40/45	1

Polyethylene stopper

Art. No.	Cone	Units
073-07/16P	7/16	1
073-001064	10/19	1
073-001065	12/21	1
073-001066	14/23	1
073-001067	19/26	1
073-001068	24/29	1
073-001069	29/32	1
073-001075	45/40	1
073-10716P	7/16	10
073-101064	10/19	10
073-101065	12/21	10
073-101066	14/23	10
073-101067	19/26	10
073-101068	24/29	10
073-101069	29/32	10
073-101075	45/40	10



Traps

Cold trap, jacketed, with PTFE needle screwcock

Art. No.	Cone	Socket	Units
073-001231	29/32	29/32	1

Traps (continuation)

Cold trap, jacketed

Art. No.	Cone	Socket	Effective dimension (mm)	Units
073-1231/1	29/32	29/32	1200x80 (Ø external) x 44 mm (Ø internal)	1

Cold trap, with PTFE needle screwcock

Art. No.	Cone	Socket	Units
073-001232	29/32	29/32	1

Cold trap

Art. No.	Length (mm)	Ø External (mm)	Units
073-001225	125	24	1
073-001226	175	40	1

Tubes

Centrifuge tube, graduated, round bottom

Art. No.	Dimensions (mm)	Capacity (ml)	Units
073-001249 (Photo 1)	17x105	10	1

Centrifuge tube, graduated, conical bottom

Art. No.	Dimensions (mm)	Capacity (ml)	Units
073-001251 (Photo 2)	17x105	10	1
073-001252 (Photo 3)	17x115	15	1

Centrifuge tube, conical bottom

Art. No.	Dimensions (mm)	Capacity (ml)	Units
073-001250 (Photo 4)	16x110	12	1

Centrifuge tube, round bottom, DIN 58970

Art. No.	Dimensions (mm)	Capacity (ml)	Units
073-001242	12x100	6	1
073-001243	16x100	12	1
073-001244	24x100	25	1
073-001245	24x120	30	1
073-001246	34x100	50	1
073-001247	44x100	80	1
073-001248	56x147	250	1

Connection tube right angle

Art. No.	Hose connection or olive (mm)	Units
073-001270	8/9	1
073-001271	10/11	1
073-001272	12/13	1

Tubes (continuation)

Connection tube, "T" shape

Art. No.	Hose connection or olive (mm)	Units
073-001273	8/9	1
073-001274	10/11	1
073-001275	12/13	1



Connection tube, "Y" shape

Art. No.	Hose connection or olive (mm)	Units
073-001276	8/9	1
073-001277	10/11	1
073-001278	12/13	1



Connection tube, straight

Art. No.	Hose connection or olive (mm)	Units
073-001267	8/9	1
073-001268	10/11	1
073-001269	12/13	1



Connection tube, straight, different diameters

Art. No.	Hose connection or olive (mm)	Units
073-001279	8/9x10/11	1
073-001280	8/9x12/13	1
073-001281	8/9x15/16	1
073-001282	10/11x12/13	1
073-001283	10/11x15/16	1



Digestion tube straight for Tecator Kjeldahl equipment

Art. No.	Dimensions (mm)	Cap. (ml)	Units
073-001362	42x300	250	1



Digestion tubes for Selecta Kjeldahl equipment, graduated

Art. No.	Dimensions (mm)	Capacity (ml)	Units
073-001360	26x300	100	1
073-001361	42x300	250	1



Digestion tube constricted with volume mark for Tecator equipment

Art. No.	Dimensions (mm)	Units
073-001358	42x300	1
073-001359	48x260	1



Tubes

Tubes (continuation)



Drying tube "U" shape

For use with desiccants such as calcium chloride

Art. No.	Length (mm)	Ø (mm)	Units
073-001307	120	12	1
073-001310	200	20	1



Drying tube "U" shaped, with two glass stopcocks

For use with desiccants such as calcium chloride.

Art. No.	Length (mm)	Ground joints	Units
073-001316	125	2x14/23	1
073-001317	150	2x19/26	1



Drying tube, angled

For use with a desiccant such as calcium chloride.

Art. No.	Cone	Units
073-001298	14/23	1
073-001299	19/26	1
073-001301	29/32	1



Durham tube, soda lime glass

For use in microbiology.

Art. No.	Dimensions (mm)	Units
124-00620C	6x20	100
124-00630C	6x30	100
124-00640C	6x40	100
124-00730C	7x30	100
124-00740C	7x40	100
124-00830C	8x30	100



Melting point tube, Thiele

Art. No.	Dimensions (mm)	Units
073-001284	22x150	1
073-001285	30x180	1

Tubes (continuation)

Nessler tube with spout

For colour comparison of water samples etc. Manufactured from soda-lime tubing.

Art. No.	Ø (mm)	Cap. (ml)	Length (mm)	Units
073-001259	26	50	150	1
073-001260	26	25/50	150	1
073-001261	32	100	200	1
073-001262	32	50/100	200	1

Nessler tube without spout

Art. No.	Ø (mm)	Cap. (ml)	Length (mm)	Units
073-001255	24	50	180	1
073-001256	24	25/50	180	1
073-001257	28	100	280	1
073-001258	28	50/100	280	1



Test tube, without rim, with marking spot

Made from Borosilicate 3.3 glass wall thickness of 1 mm to guarantee good heat transfer and increase chemical resistance.

Art. No.	Dimensions (mm)	Capacity (ml)	Units
124-01075P	10x75	3	100
124-10100P	10x100	4	100
124-01275P	12x75	5	100
124-12100P	12x100	6	100
124-12120P	12x120	8	100
124-15150P	15x125	15	100
124-16100P	16x100	15	100
124-16160P	16x160	20	100
124-18180P	18x180	30	100
124-20200P	20x200	40	100



Test tube, without rim, with marking spot

Made from soda lime glass with a wall thickness of 0,8 mm.

Art. No.	Dimensions (mm)	Capacity (ml)	Units
124-01075C	10x175	3	100
124-10100C	10x100	4	100
124-01275C	12x75	5	100
124-12100C	12x100	6	100
124-12120C	12x120	8	100
124-15150C	15x150	15	100
124-16100C	16x100	15	100
124-16160C	16x160	20	100
124-18180C	18x180	30	100
124-20200C	20x200	40	100
124-25150C	25x150	50	100



Test tube, round bottom, ground joint, without stopper

Art. No.	Dimensions (mm)	Capacity (ml)	Joint	Units
073-001236	12x100	5	10/19	1
073-001237	18x125	10	12/21	1
073-001238	18x125	15	14/23	1
073-001239	24x150	30	14/26	1
073-001240	28x175	60	24/29	1
073-001241	34x200	100	29/32	1



Tubes

Water jet pumps



Water jet vacuum pump with non-return valve

Ideal for cleaning up spilled chemicals, as well as for filtration work. Built-in non return valve eliminates any back flow.

Art. No.	Hose connection or olive lateral (mm)	Hose connection or olive central (mm)	Units
073-001222	10/11	15/16	1



Water jet vacuum pump, plain

Ideal for cleaning up spilled chemicals, as well as for filtration work.

Art. No.	Hose connection or olive lateral (mm)	Hose connection or olive central (mm)	Units
073-001221	10/11	15/16	1



Non-return valve

As accessory for plain water jet vacuum pumps

Art. No.	Hose connection or olive (mm)	Units
073-001224	10/11	1

Weighing



Weighing funnels, glass

Art. No.	Capacity (ml)	Ø Stem (mm)	Units
073-000853	3	7	1
073-000854	6	10	1
073-000855	10	12	1
073-008520	20	12	1
073-085550	50	12	1

Weighing bottle with externally ground body, cylindrical, 24 x 35 mm

Weighing bottle with cap-type closure that fits over externally ground body.

Art. No.	Description	Socket	Cone	Units
073-000841	Complete			1
073-000842	Lid interchangeable	24/10		1
073-000843	Body 35 mm length		24/10	1

Weighing bottle with externally ground body, cylindrical, 28 x 35 mm

Weighing bottle with cap-type closure that fits over externally ground body.

Art. No.	Description	Socket	Cone	Units
073-000844	Complete			1
073-000845	Lid interchangeable	29/10		1
073-000846	Body 25 mm length		29/10	1



Weighing bottle with externally ground body, cylindrical, 44 x 40 mm

Weighing bottle with cap-type closure that fits over externally ground body.

Art. No.	Description	Socket	Cone	Units
073-000847	Complete			1
073-000848	Lid interchangeable	45/12		1
073-000849	Body 40 mm length		45/12	1

Weighing bottle with externally ground body, cylindrical, 54 x 40 mm

Weighing bottle with cap-type closure that fits over externally ground body.

Art. No.	Description	Socket	Cone	Units
073-000850	Complete			1
073-000851	Lid interchangeable	55/15		1
073-000852	Body 40 mm length		55/15	1

Weighing bottle with internally ground body, cylindrical, 28 x 30 mm

Weighing bottle with plug-type closure that fits into internally ground body.

Art. No.	Description	Socket	Cone	Units
073-000829	Complete			1
073-000830	Lid interchangeable		29/10	1
073-000831	Body 30 mm length	29/10		1

Weighing bottle with internally ground body, cylindrical, 44 x 40 mm

Weighing bottle with plug-type closure that fits into internally ground body.

Art. No.	Description	Socket	Cone	Units
073-000832	Complete			1
073-000833	Lid interchangeable		40/12	1
073-000834	Body 40 mm length	40/12		1



Weighing bottle with internally ground body, cylindrical, 50 x 40 mm

Weighing bottle with plug-type closure that fits into internally ground body.

Art. No.	Description	Socket	Cone	Units
073-000835	Complete			1
073-000836	Lid interchangeable		45/12	1
073-000837	Body 40 mm length	45/12		1

Weighing bottle with internally ground body, cylindrical, 60 x 40 mm

Weighing bottle with plug-type closure that fits into internally ground body.

Art. No.	Description	Socket	Cone	Units
073-000838	Complete			1
073-000839	Lid interchangeable		55/15	1
073-000840	Body 40 mm length	55/15		1

Volumetric glassware

Marking of our volumetric instruments 54

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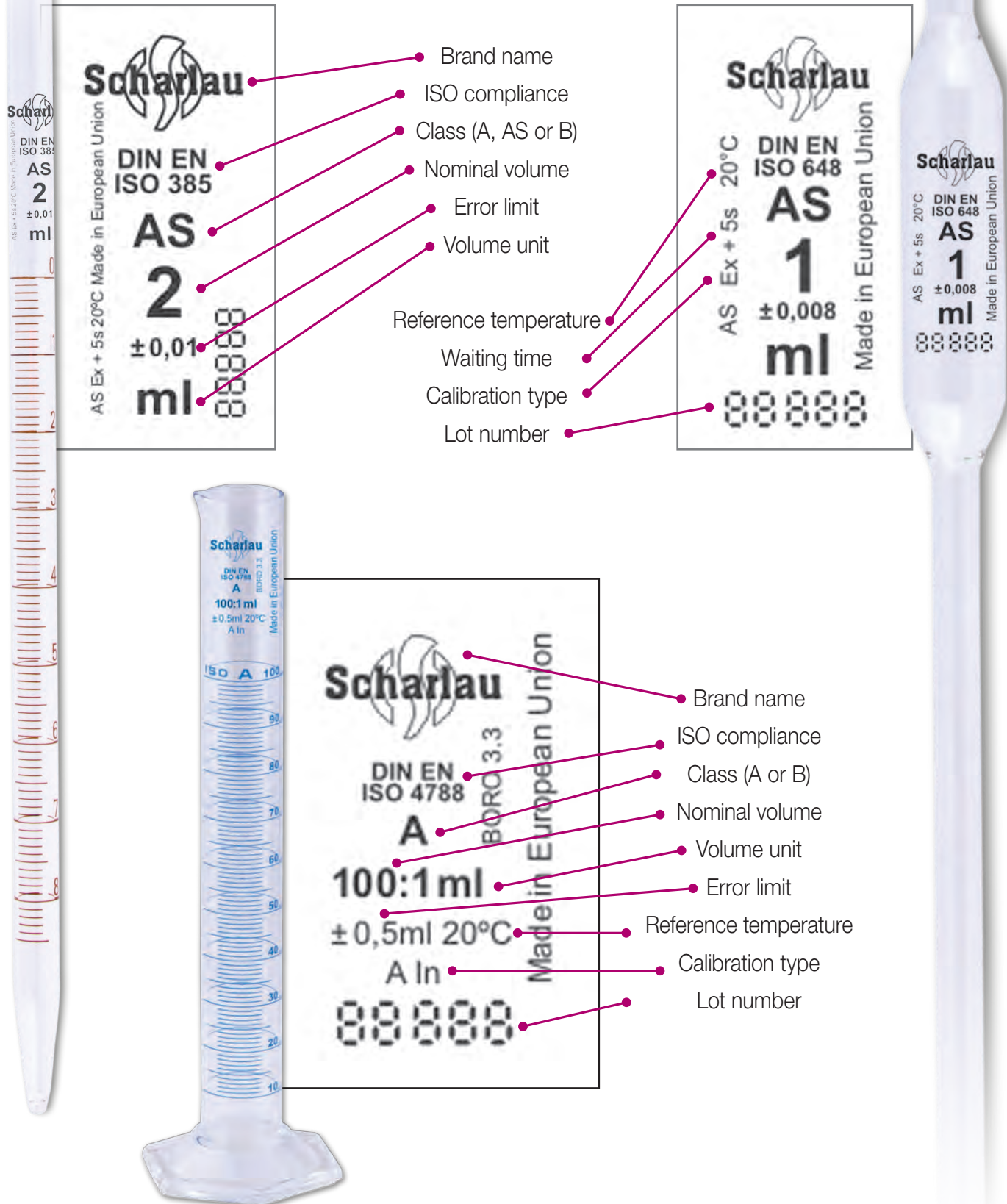
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Pipettes 62

Volumetric flasks 64

All our volumetric glassware comes
with engraved lot number
and is supplied with a lot certificate.

Marking of our volumetric instruments



Marking of our volumetric instruments



Classification by accuracy

There are two accuracy classes for volumetric glassware, **A and B**. Class B has twice the error limit of class A.

Scharlau class A glassware is always supplied with the corresponding Batch Certificate.

Error limits for the different classes have been established by certain DIN EN ISO directives which are indicated on each instrument.

Pipettes and burettes are also available as “swift delivery”. In this case the instrument will be marked with “AS” instead of “A”.

If we compared a standard class A volumetric pipette of 25 ml with one of swift delivery, we would observe the following delivery times:

Class A	Class AS
Delivery time: 25-50 s	Delivery time: 15-20 s
Waiting time: 0	Waiting time: 5 s

Certificate of performance

All our class A and AS volumetric glassware comes with a certificate of performance contained in each box. This is a lot certificate and each instrument carries the lot number printed on.

A certificate is issued per lot and indicates among other information the ‘Mean Value’ and the ‘Standard Deviation’.

Quality

Quality assurance is based on compliance with the applicable European (EN) and International (ISO) Standards. Statistical Process Control (SPC) helps us to obtain as small as possible a deviation from the nominal value (precision) and at the same time a minimum of dispersion of the individual results (coefficient of variation).

Burettes

All our burettes are Class AS and calibrated “to deliver” with a waiting time of 30 s and are available only with Schellbach stripe for better reading.

All burettes come with fused on, high contrast, ceramic enamel blue printed lines and inscriptions.

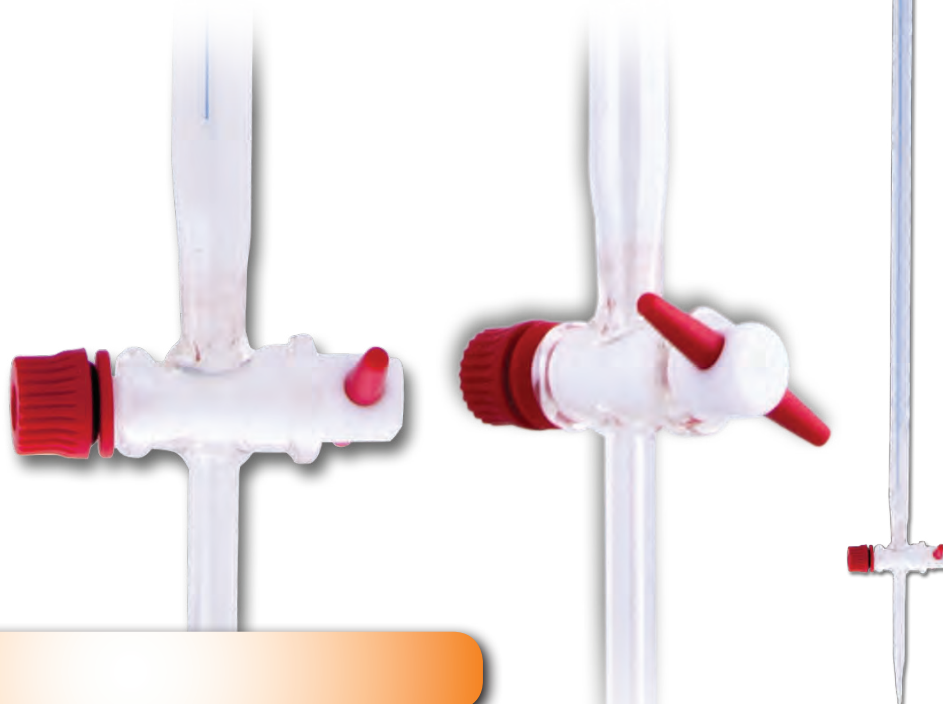
• Correct handling of burettes

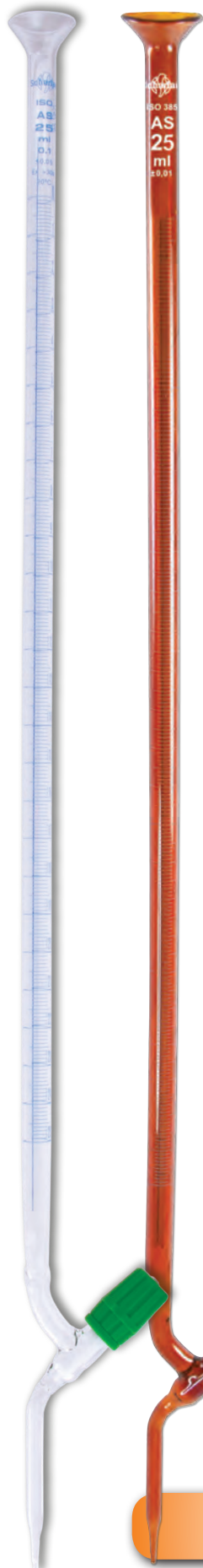
- Burettes are used for titration and near to the end point, the standard solution is added drop-wise to avoid over-titration. Since this drop-wise addition normally takes longer than the 30 s waiting time, in practise it is not necessary to observe the waiting time.
- Rinse the burette in upright position with the same solution that will be used for the titration.
- Fill the burette further than the zero mark so that there is enough liquid to prime the stopcock or screwcock. Make sure the valves are free from air bubbles.
- Drain the solution to set the zero point at eye level.
- Wipe off any drops at the tip.
- Start the titration by opening the stopcock or screwcock slowly. The burette tip should not touch the wall of the titration vessel. This vessel should rest on a stirrer to guarantee agitation of the solution to be titrated and on a white surface to facilitate observation of the colour change.
- Close the valve as soon as a colour change has occurred.
- Read the amount of dispensed solution

Burette, Class AS, PTFE key stopcock, Schellbach stripe, to deliver (Ex), serialized and certified

Borosilicate glass. Marked with individual lot number. Supplied with certificate of performance. Calibrated to deliver (Ex). Waiting time 30 s. Marked with a blue metric scale. With Schellbach stripe. Complies with ISO 385.

Art. No.	Cap. (ml)	Graduation	Units
073-001520	10	1/20	1
073-001521	25	1/10	1
073-001522	50	1/10	1





Burette, Class AS, glass key stopcock, Schellbach stripe, to deliver (Ex), serialized and certified

Borosilicate glass. Marked with individual lot number. Supplied with certificate of performance. Calibrated to deliver (Ex). Waiting time 30 s. Marked with a blue metric scale. With Schellbach stripe. Complies with ISO 385.

Art. No.	Capacity (ml)	Graduation	Units
073-001508	10	1/20	1
073-001509	25	1/10	1
073-001510	50	1/10	1
073-001511	100	1/5	1

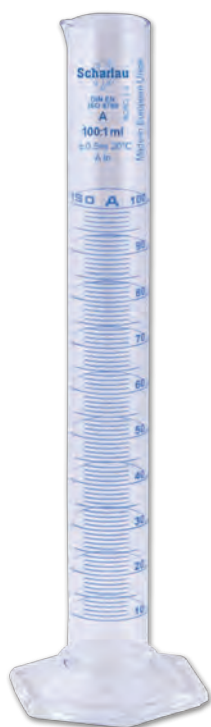


Burette, Class AS, PTFE screwcock, Schellbach stripe, to deliver (Ex), serialized and certified

Borosilicate glass. Marked with individual lot number. Supplied with certificate of performance. Calibrated to deliver (Ex). Waiting time 30 s. Marked with a blue metric scale. With Schellbach stripe. Complies with ISO 385.

Art. No.	Capacity (ml)	Graduation	Units
073-001512	10	1/20	1
073-001513	25	1/10	1
073-001514	50	1/10	1
073-001515	100	1/5	1





Cylinders, graduated

Graduated cylinders

All our graduated cylinders are calibrated “to contain”.

Graduated cylinders come with fused on, high contrast, ceramic enamel blue printed lines and inscriptions.

• Correct handling of graduated cylinders

Fill with the liquid until the meniscus is exactly at the desired ring mark. The bottom of the meniscus should be read at eye level. The inside cylinder wall should not be wetted above the mark.

Graduated cylinder, to contain, Class A, with pour spout, serialized and certified

Borosilicate glass. Marked with individual lot number. Supplied with certificate of performance.
Hexagonal base. Marked with a blue single metric scale. Complies with ISO 4788.

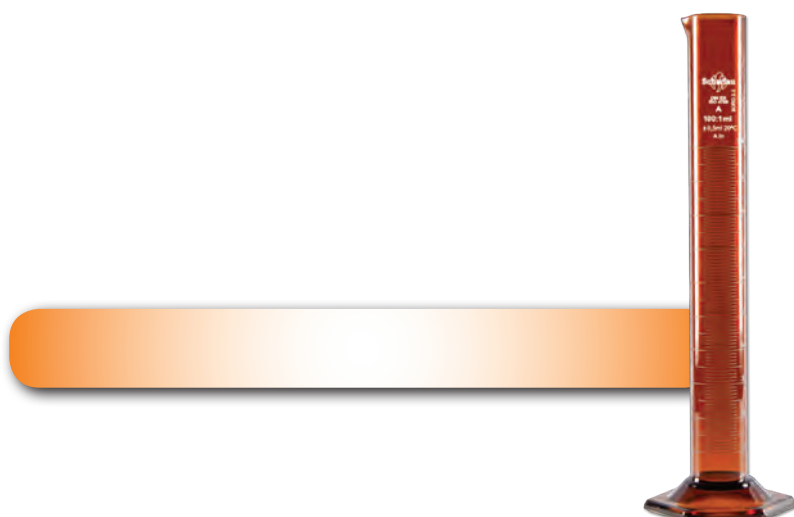
Art. No.	Capacity (ml)	Division (ml)	Units
073-201750	10	1/5	2
073-201751	25	1/2	2
073-201752	50	1/2	2
073-201753	100	1/1	2
073-201754	250	2/1	2
073-001755	500	5/1	1
073-001756	1.000	10/1	1



Graduated cylinder, to contain, Class B, with pour spout

Soda glass. Hexagonal base. Marked with a blue single metric scale. Complies with ISO 4788.

Art. No.	Capacity (ml)	Division (ml)	Units
073-101743	10	1/10	2
073-101744	25	1/5	2
073-101745	50	1/2	2
073-101746	100	1/1	2
073-101747	250	2/1	2
073-101748	500	5/1	1
073-101749	1.000	10/1	1



Cylinders, graduated

Graduated mixing cylinders

All our graduated mixing cylinders are Class A and calibrated "to contain".

Graduated cylinders come with fused on, high contrast, ceramic enamel blue printed lines and inscriptions.

• Correct handling of graduated mixing cylinders

These cylinders are often used in lieu of volumetric flasks for the preparation of standard solutions. Available with PE or glass stoppers.

Fill with the liquid until the bottom of the meniscus is exactly at the desired ring mark. The meniscus should be read at eye level. The inside cylinder wall should not be wetted above the mark. When finished, apply the stopper and mix by shaking the cylinder.



Graduated mixing cylinder, to contain, Class A, with PE stopper, serialized and certified

Borosilicate glass. Marked with individual lot number. Supplied with certificate of performance. Hexagonal base. Marked with a blue single metric scale. Complies with ISO 4788.

Art. No.	Capacity (ml)	Division (ml)	Socket	Units
073-201765	10	1/5	10/19	2
073-201766	25	1/2	14/23	2
073-201767	50	1/1	14/26	2
073-201768	100	1/1	24/29	2
073-201769	250	2/1	29/32	2
073-001770	500	5/1	34/35	1
073-001771	1.000	10/1	45/42	1



* If you prefer glass stopper, please order separately on page 45.



Dispensers, Kipp

Dispenser Kipp, 1 ml

Art. No.	Description	Cone	Socket	Units
073-001586	Complete			1
073-001587	Dispenser Kipp head 1 ml	29/32		1
073-000861	Bottle 500 ml		29/32	1

Dispenser Kipp, 2 ml

Art. No.	Description	Cone	Socket	Units
073-001588	Complete			1
073-001589	Dispenser Kipp head 2 ml	29/32		1
073-000861	Bottle 500 ml		29/32	1

Dispenser Kipp, 5 ml

Art. No.	Description	Cone	Socket	Units
073-001590	Complete			1
073-001591	Dispenser Kipp head 5 ml	29/32		1
073-000862	Bottle 1000 ml		29/32	1

Dispenser Kipp, 10 ml

Art. No.	Description	Cone	Socket	Units
073-001592	Complete			1
073-001593	Dispenser Kipp head 10 ml	29/32		1
073-000862	Bottle 1000 ml		29/32	1

Dispenser Kipp, 15 ml

Art. No.	Description	Cone	Socket	Units
073-001594	Complete			1
073-001595	Dispenser Kipp head 15 ml	29/32		1
073-000862	Bottle 1000 ml		29/32	1

Dispenser Kipp, 20 ml

Art. No.	Description	Cone	Socket	Units
073-001596	Complete			1
073-001597	Dispenser Kipp head 20 ml	29/32		1
073-000862	Bottle 1000 ml		29/32	1

Dispenser Kipp, 25 ml

Art. No.	Description	Cone	Socket	Units
073-001598	Complete			1
073-001599	Dispenser Kipp head 25 ml	29/32		1
073-000862	Bottle 1000 ml		29/32	1

Dispenser Kipp, 50 ml

Art. No.	Description	Cone	Socket	Units
073-001600	Complete			1
073-001601	Dispenser Kipp head 50 ml	29/32		1
073-000862	Bottle 1000 ml		29/32	1

Pipettes

Different kinds of pipettes

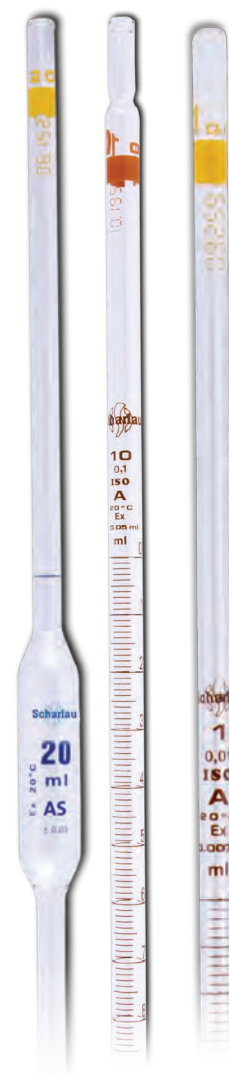
- Volumetric pipettes allow the user to measure a volume of solution extremely accurately and then add it to something else. They are commonly used to make laboratory solutions from a base stock as well as prepare solutions for titration. They typically only allow measurement of a single volume in a particular size pipette (as with volumetric flasks). Therefore, they come in many different sizes.
- There are other types of pipettes also, such as a Pasteur pipette, which is not used to measure the volume of the liquid. It is essentially a large dropper, which can be used to remove liquid from one container and add it to another.
- There are also graduated pipettes, called Mohr pipettes, which allow you to measure the volume of the liquid in the pipette, although not as accurately as a volumetric pipette. These use a series of marked lines (as on a graduated cylinder) to indicate the different volumes. They come in a variety of sizes. Mohr pipettes are used much like a burette, in that the volume is found by calculating the difference in the level of the liquid before and after its introduction.
- All glass pipettes require the use of some kind of additional suction device, typically a pipette bulb (with the exception of the Eppendorf pipette or other similar type pipettes, which have a built-in suction mechanism). The pipette bulb is a rubber bulb which sucks the liquid into the pipette and also allows you to drain the pipette in a controlled fashion. A Beral pipette is a one-piece pipette, usually made from flexible soft plastic (polyethylene) that has a built-in bulb on the end.

What Scharlau offers

All our pipettes are Class A or Class AS and calibrated "to deliver".

Volumetric pipettes come with fused on, high contrast, ceramic enamel blue printed lines and inscriptions.

Graduated pipettes are type 3, with the zero point at the top and for complete delivery. Lines and inscriptions have been obtained by staining the glass with an amber colour. This method offers additional resistance to aggressive cleaning agents and can only be removed by abrasion.



Correct method for pipetting

- Draw liquid above the top graduation with a pipetting aid (never with the mouth).
- Wipe off any liquid on the outside of the pipette tip with a soft cloth or tissue.
- Use the forefinger (not the thumb) to set the meniscus. The bottom of the meniscus must be even with the middle of the graduation mark (at eye level).
- Hold the pipette vertically and drain it with the tip touching the inner wall of the receiving container.
- After having emptied the pipette, draw it upwards about 10 mm along the inner wall of the container to remove any remaining liquid. In the case of class AS pipettes, observe the waiting time of 5 s before drawing the pipette up.
- Do not remove the tip with strong motion. Whatever residual liquid that is still present in the tip must be left there.



Pipettes

Volumetric pipette, one mark, to deliver (Ex), Class AS, colour-coded, serialized and certified

Soda-lime glass. Compliant with ISO 646. 5s waiting time. Marked with individual lot number. Supplied with certificate of performance. Calibrated to deliver (Ex). Marked with capacity on the bulb. Colour-coded (ISO 1769) for ease in selection. Blue scale.

Art. No.	Cap. (ml)	Units
073-991676	1	5
073-991677	2	5
073-991678	5	5
073-991679	10	5
073-991681	20	5
073-991682	25	5
073-991683	50	2

Volumetric pipette, two marks, to deliver (Ex), Class AS, colour-coded, serialized and certified

Soda-lime glass. Compliant with ISO 646. 5 s waiting time. Marked with individual lot number. Supplied with certificate of performance. Calibrated to deliver (Ex). Marked with capacity on the bulb. Colour-coded (ISO 1769) for ease in selection. Blue scale.

Art. No.	Cap. (ml)	Units
073-991696	1	5
073-991697	2	5
073-991698	5	5
073-991699	10	5
073-991701	20	1
073-991702	25	5
073-991703	50	2

Graduated pipette, to deliver (Ex), Class AS, total delivery, colour-coded, serialized and certified

Clear glass exceeding HGB3 (ISO 719). Compliant with ISO 835. 5 s waiting time. Marked with individual lot number. Supplied with certificate of performance. Calibrated to deliver (Ex). Colour-coded (ISO 1769) for ease in selection. Amber colour scale permanently fused into tubing without etching.

Art. No.	Cap. (ml)	Graduation	Units
073-991305	0,5	1/100	5
073-991715	1	1/100	5
073-991717	2	1/50	5
073-991719	5	1/20	5
073-991720	10	1/10	5
073-991721	25	1/10	5



Volumetric flasks

All our volumetric flasks are Class A and calibrated "to contain".

Volumetric flasks come with fused on, high contrast, ceramic enamel blue printed lines and inscriptions.

• Correct handling of volumetric flasks

- Volumetric flasks are often used for preparing accurate dilutions or for the preparation of standard solutions.
- To prepare a standard solution the exact amount of substance is weighed and added to the flask or an accurate amount of concentrated solution is poured into the flask.
- The flask should be then filled with distilled water (or the appropriate diluent) to 50 % capacity and shaken to ensure dissolution of the substance. The remaining volume of water/diluent should then be added to just below the ring mark.
- Using a wash bottle water/diluent should then be added carefully until the bottom of the meniscus is exactly at the ring mark (at eye level).
- The flask should then be closed and shaken to mix the contents.

Volumetric flasks



Volumetric flask, Class A, to contain, with PE stopper, serialized and certified

Borosilicate glass flask with graduation ring in high contrast blue enamel. Marked with individual lot number. Supplied with certificate of performance. Compliant with ISO 1042. Calibrated to contain. PE stopper to fit in the ground neck. *

Art. No.	Capacity (ml)	Socket	Units
073-001630	10	10/19	1
0732163120	20	10/19	2
073-201631	25	12/21	2
073-201632	50	12/21	2
073-201633	100	14/23	2
073-201634	200	14/23	2
073-201635	250	14/23	2
073-201636	500	19/26	2
073-201637	1.000	24/29	2

* If you prefer glass stopper, please order separately on page 45.



All flasks available in amber colour.
Please substitute dash for an A in our article number.

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Beakers



Beaker, low form with graduation, borosilicate glass, DIN 12331

- Made in Germany -

Art. No.	Capacity (ml)	Ø (mm)	Height (mm)	Units
0033550104	50	42	60	1
0033510105	100	50	70	1
0033510106	150	60	80	1
0033510108	250	70	95	1
0033510110	400	80	110	1
0033510112	600	90	125	1
0033510113	800	100	135	1
0033510114	1000	105	145	1
1033550104	50	42	60	10
1033510105	100	50	70	10
1033510106	150	60	80	10
1033510108	250	70	95	10
1033510110	400	80	110	10
1033510112	600	90	125	10
1033510113	800	100	135	10
1033510114	1000	105	145	10

Beaker, tall form with graduation, borosilicate glass, DIN 12331

- Made in Germany -

Art. No.	Capacity (ml)	Ø (mm)	Height (mm)	Units
0033550204	50	38	70	1
0033510205	100	48	80	1
0033510206	150	54	95	1
0033510208	250	60	120	1
0033510210	400	70	130	1
0033510212	600	80	150	1
0033510213	800	90	175	1
0033510214	1000	95	180	1
1033550204	50	38	70	10
1033510205	100	48	80	10
1033510206	150	54	95	10
1033510208	250	60	120	10
1033510210	400	70	130	10
1033510212	600	80	150	10
1033510213	800	90	175	10
1033510214	1000	95	180	10

Crystallizing dishes



Evaporating dish, borosilicate glass, flat bottom with spout, DIN 12336

- Made in Germany -

Art. No.	Ø (mm)	Height (mm)	Capacity (ml)	Units
0033794103	60	30	45	1
0033794104	70	35	60	1
0033794105	80	45	90	1
0033794106	95	55	170	1
0033794107	115	65	320	1
0033794108	140	80	600	1
1033794103	60	30	45	10
1033794104	70	35	60	10
1033794105	80	45	90	10
1033794106	95	55	170	10
1033794107	115	65	320	10
1033794108	140	80	600	10

Crystallizing dishes (continuation)

Crystallizing dish, borosilicate glass, with spout, DIN 12338

- Made in Germany -

Art. No.	Ø (mm)	Height (mm)	Capacity (ml)	Units
0033795103	60	35	60	1
0033795104	70	40	100	1
0033795105	80	45	150	1
0033795106	95	55	300	1
0033795107	115	65	500	1
0033795108	140	75	900	1
1033795103	60	35	60	10
1033795104	70	40	100	10
1033795105	80	45	150	10
1033795106	95	55	300	10
1033795107	115	65	500	10
1033795108	140	75	900	10



Crystallizing dish, borosilicate glass, without spout, DIN 12337

- Made in Germany -

Art. No.	Ø (mm)	Height (mm)	Capacity (ml)	Units
0033795204	70	40	100	1
0033795205	80	45	150	1
0033795206	95	55	300	1
0033795207	115	65	500	1
1033795204	70	40	100	10
1033795205	80	45	150	10
1033795206	95	55	300	10
1033795207	115	65	500	10



Crystallizing dishes · Desiccators

Desiccators

Vacuum desiccator without lid, DIN 12491

- Made in Germany -

Art. No.	Nominal size (ml)	Units
0033596001	100	1
0033596002	150	1
0033596003	200	1
0033596004	250	1
0033596005	300	1



Vacuum desiccator with tubulated lid and PTFE stopcock, DIN 12491

- Made in Germany -

Art. No.	Nominal size (ml)	Height (mm)	Socket	Units
0033596312	150	250	24/29	1
0033596313	200	300	24/29	1
0033596314	250	355	24/29	1





Desiccators (continuation)

Vacuum desiccator with Knobbed lid, DIN 12491

- Made in Germany -

Art. No.	Nominal size (ml)	Height (mm)	Units
0033596112	150	265	1
0033596113	200	315	1
0033596114	250	370	1
0033596115	300	445	1

PTFE stopcock for desiccator

- Made in Germany -

Art. No.	Ground joint	Units
0033596900	24/29	1

Plate for desiccator in porcelain, DIN 12911

- Made in Germany -

Art. No.	Ø (mm)	Nominal size (ml)	Units
0033596802	140	150	1
0033596803	190	200	1
0033596804	235	250	1
0033596805	280	300	1

Knobbed lid for desiccator, DIN 12491

- Made in Germany -

Art. No.	Nominal size (ml)	Units
0033596102	150	1
0033596103	200	1
0033596104	250	1
0033596105	300	1

Tubulated lid for desiccator, DIN 12491

- Made in Germany -

Art. No.	Nominal size (ml)	Socket	Units
0033596302	150	24/29	1
0033596303	200	24/29	1
0033596304	250	24/29	1
0033596305	300	24/29	1

Filtering flasks

Filtering flask with glass hose connection

Art. No.	Capacity (ml)	Ø Neck (mm)	Units
0033768101	100	24	1
0033768102	250	35	1
0033768103	500	35	1
0033768104	1000	45	1
1033768101	100	24	10
1033768102	250	35	10
1033768103	500	35	10
1033768104	1000	45	10



Flasks

Erlenmeyer flask, wide neck, DIN 1773

Art. No.	Capacity (ml)	Ø Neck (mm)	Height (mm)	Units
0033567504	50	34	85	1
0033527505	100	34	105	1
0033527507	200	50	131	1
0033527508	250	50	140	1
0033527509	300	50	156	1
0033527511	500	50	175	1
0033527514	1000	50	220	1
1033567504	50	34	85	10
1033527505	100	34	105	10
1033527507	200	50	131	10
1033527508	250	50	140	10
1033527509	300	50	156	10
1033527511	500	50	175	10
1033527514	1000	50	220	10



Filtering flasks · Flasks

Erlenmeyer flask, narrow neck, DIN 1773

Art. No.	Capacity (ml)	Ø Neck (mm)	Height (mm)	Units
0033567304	50	22	90	1
0033527305	100	22	105	1
0033527307	200	34	135	1
0033527308	250	34	145	1
0033527309	300	34	160	1
0033527311	500	34	180	1
0033527314	1000	42	220	1
1033567304	50	22	90	10
1033527305	100	22	105	10
1033527307	200	34	135	10
1033527308	250	34	145	10
1033527309	300	34	160	10
1033527311	500	34	180	10
1033527314	1000	42	220	10





Flasks (continuation)

Flat bottom flask, narrow neck, DIN 1773

Art. No.	Capacity (ml)	Ø Neck (mm)	Units
0033562304	50	26	1
0033522305	100	26	1
0033522308	250	34	1
0033522311	500	34	1
0033562314	1000	42	1
1033562304	50	26	10
1033522305	100	26	10
1033522308	250	34	10
1033522311	500	34	10
1033562314	1000	42	10

Round bottom flask, narrow neck, DIN 1773

Art. No.	Capacity (ml)	Ø Neck (mm)	Units
0033561304	50	26	1
0033521305	100	26	1
0033521308	250	34	1
0033521311	500	34	1
0033521314	1000	42	1
1033561304	50	26	10
1033521305	100	26	10
1033521308	250	34	10
1033521311	500	34	10
1033521314	1000	42	10

Funnels

Funnel for powdered products, borosilicate glass

Art. No.	Ø (mm)	Ø Stem (mm)	Length stem(mm)	Units
0033793307	60	14	25	1
0033793308	70	16	30	1
0033793309	80	17	30	1
0033793310	100	22	35	1
1033793307	60	14	25	10
1033793308	70	16	30	10
1033793309	80	17	30	10
1033793310	100	22	35	10

Funnel, short stem, borosilicate glass

Art. No.	Ø (mm)	Ø Stem (mm)	Length stem (mm)	Units
0033793104	45	6	45	1
0033793105	50	8	50	1
0033793106	55	8	55	1
0033793107	60	8	60	1
0033793108	75	8	70	1
0033793109	80	8	80	1
1033793104	45	6	45	10
1033793105	50	8	50	10
1033793106	55	8	55	10
1033793107	60	8	60	10
1033793108	75	8	70	10
1033793109	80	8	80	10



Funnels (continuation)

Funnel, short stem, soda lime glass

Art. No.	Ø (mm)	Ø Stem (mm)	Length stem (mm)	Units
359-793104	45	6	45	1
359-793105	50	8	50	1
359-793106	55	8	55	1
359-793107	60	8	60	1
359-793108	75	8	70	1
359-793109	80	8	80	1
3591793104	45	6	45	10
3591793105	50	8	50	10
3591793106	55	8	55	10
3591793107	60	8	60	10
3591793108	75	8	70	10
3591793109	80	8	80	10



Funnel, long stem, borosilicate glass

Art. No.	Ø (mm)	Ø Stem (mm)	Length stem (mm)	Units
0033793203	40	6	150	1
0033793204	45	6	150	1
0033793206	55	8	150	1
0033793207	60	8	150	1
0033793208	75	8	150	1
0033793209	80	8	150	1
1033793203	40	6	150	10
1033793204	45	6	150	10
1033793206	55	8	150	10
1033793207	60	8	150	10
1033793208	75	8	150	10
1033793209	80	8	150	10



Funnel, long stem, soda lime glass

Art. No.	Ø (mm)	Ø Stem (mm)	Length stem (mm)	Units
359-793203	40	6	150	1
359-793204	45	6	150	1
359-793206	55	8	150	1
359-793207	60	8	150	1
359-793208	75	8	150	1
359-793209	80	8	150	1
3591793203	40	6	150	10
3591793204	45	6	150	10
3591793206	55	8	150	10
3591793207	60	8	150	10
3591793208	75	8	150	10
3591793209	80	8	150	10



Funnels

Laboratory bottles

Laboratory bottle graduated with PP screw cap, ISO 4796



Art. No.	Capacity (ml)	Thread GL	Units
0033799005	100	GL45	1
0033799006	250	GL45	1
0033799007	500	GL45	1
0033799008	1000	GL45	1
0033799009	2000	GL45	1
0033799012	5000	GL45	1
0033799020	10000	GL45	1
1033799005	100	GL45	10
1033799006	250	GL45	10
1033799007	500	GL45	10
1033799008	1000	GL45	10
1033799009	2000	GL45	10

Laboratory bottle graduated, amber, with PP screw cap, ISO 4796



Art. No.	Capacity (ml)	Thread GL	Units
33799005AM	100	GL45	1
33799006AM	250	GL45	1
33799007AM	500	GL45	1
33799008AM	1000	GL45	1
33799105AM	100	GL45	10
33799106AM	250	GL45	10
33799107AM	500	GL45	10
33799108AM	1000	GL45	10

Staining jars

Staining jar



	Slieves	Units
According to Hellendahl		
0762100001 (Picture 1)	16	1
0762200001 (Picture 2)	16	1
According to Coplin		
0762400001 (Picture 3)	10	1
According to Schiefferdecker		
0762300001 (Picture 4)	10	1

Glass jar for staining tray

Art. No.	Description	Slieves	Units
0762500001 (Picture 5)	Glass jar		1
0762600001 (Picture 6)	Glass jar	10	1
038-036003	Steel handle for staining stray		1

Vials

Crimp top vials

Art. No.	Description	Units
VTRCR12X32	Crimp top clear vial 1.8 ml	100
CRIMPCAP12	Aluminium crimp cap 11 mm with septum	100
00S200-100	Aluminium crimp cap 11 mm with septum	1000



Screw thread vials

Art. No.	Description	Units
VTRRB12X32	Thread clear vial, 1.8 ml	100
VARBE12X32	Thread amber vial, 1.8 ml	100
RBBLSILCAP	Open top cap with PTFE/silicone septum	100



73791A9425
73793A9425 / RBBLSILCAP

Watch glasses

Watch glass

Art. No.	Ø (mm)	Units
038-182040	40	1
038-182050	50	1
038-182060	60	1
038-182070	70	1
038-182080	80	1
038-182100	100	1
038-182120	120	1
038-182150	150	1
038-182200	200	1
0381182040	40	10
0381182050	50	10
0381182060	60	10
0381182070	70	10
0381182080	80	10
0381182100	100	10
0381182120	120	10
0381182150	150	10
0381182200	200	10



Vials · Watch glasses

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