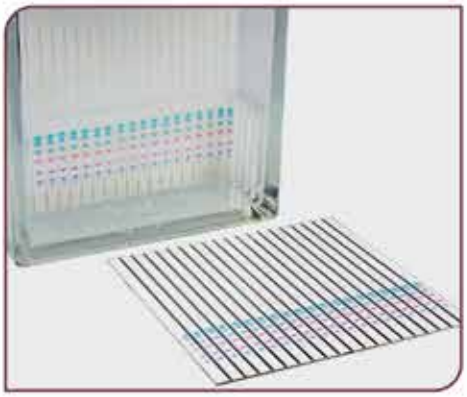
ISOLAB Laborgeräte GmbH

DIN EN ISO CERTIFIED 9001



chromatography & spectroscopy









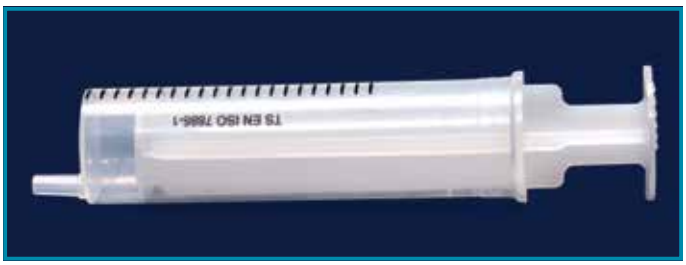

SYRINGE FILTERS - *"non-sterile" - "sterile"*

- Specially designed for HPLC sample preperations with the best quality tear proven membranes. Fully autoclavable.
- Since the housing is ultrasonically sealed they offer excellent pressure stability.
- Sample distribution rings of the body direct samples for uniform filtration with a guarantee of high flow rate and filtration speed on both directions restricting the liquid overload.
- Unique female luer-lock secures connections with syringes. Body design enables to be used with all robotic machines.
- Membrane type and porosity printed on each filter. Different colour coded sealing rings in MN enable easy differentiation of the membrane type.
- **Available 2 filters:**
  - **Syringe filters with 0,45 µm pore size**
  - **Syringe filters with 0,22 µm pore size**

ISOLAB non-sterile 0,45 um filters	MN non-sterile 0,45 um filters	non-sterile pack quantity	MN sterile 0,45 um filters	ISOLAB sterile 0,45 um filters	sterile pack quantity	filter membrane material	code name	pore size µm	diameter
094.01.001	094.02.001	100 pieces		094.05.001	50 pieces	regenerated cellulose	RC	0.45	25 mm
094.01.002	094.02.002	100 pieces		094.05.002	50 pieces	polytetrafluoroethylene	PTFE-1	0.45	25 mm
094.01.003	094.02.003	100 pieces		094.05.003	50 pieces	polyvinylidenedifluoride	PVDF	0.45	25 mm
	094.02.004	100 pieces				polyester	PET	0.45	25 mm
094.01.005	094.02.005	100 pieces		094.05.005	50 pieces	cellulosemixedesters	MV	0.45	25 mm
094.01.006	094.02.006	100 pieces	094.06.006	094.05.006	50 pieces	cellulose acetate	CA	0.45	25 mm
094.01.007	094.02.007	100 pieces		094.05.007	50 pieces	nylon / polyamide	PA	0.45	25 mm
094.01.008	094.02.008	100 pieces		094.05.008	50 pieces	polyethersulfone	PES	0.45	25 mm
094.01.009		100 pieces		094.05.009	50 pieces	polytetrafluoroethylene	PTFE-2	0.45	25 mm

ISOLAB non-sterile 0,22 um filters	MN non-sterile 0,22 um filters	non-sterile pack quantity	MN sterile 0,22 um filters	ISOLAB sterile 0,22 um filters	sterile pack quantity	filter membrane material	code name	pore size µm	diameter
094.03.001	094.04.001	100 pieces		094.07.001	50 pieces	regenerated cellulose	RC	0.22	25 mm
094.03.002	094.04.002	100 pieces		094.07.002	50 pieces	polytetrafluoroethylene	PTFE-1	0.22	25 mm
094.03.003	094.04.003	100 pieces		094.07.003	50 pieces	polyvinylidenedifluoride	PVDF	0.22	25 mm
	094.04.004	100 pieces				polyester	PET	0.22	25 mm
094.03.005	094.04.005	100 pieces		094.07.005	50 pieces	cellulosemixedesters	MV	0.22	25 mm
094.03.006	094.04.006	100 pieces	094.08.006	094.07.006	50 pieces	cellulose acetate	CA	0.22	25 mm
094.03.007	094.04.007	100 pieces		094.07.007	50 pieces	nylon / polyamide	PA	0.22	25 mm
094.03.008	094.04.008	100 pieces		094.07.008	50 pieces	polyethersulfone	PES	0.22	25 mm
094.03.009		100 pieces		094.07.009	50 pieces	polytetrafluoroethylene	PTFE-2	0.22	25 mm

***MV =** cellulose mixed esters, **CA =** cellulose acetate, **RC =** regenerated cellulose, **PA =** polyamide, **PTFE-1 =** polytetrafluoroethylene hydrophobic, **PTFE-2 =** polytetrafluoroethylene hydrophilic, **PVDF =** polyvinylidene difluoride, **PES =** polyethersulfone, **PET =** polyester*



SYRINGES - *"polypropylene" - "sterile"*

- 2 pieces syringes are suitable for HPLC applications. Sterile, pyrogen-free and for single use, latex and silicone oil free.
- Consists of very clear, highly transparent and absolutely leak-tight polypropylene barrel and polyethylene piston.
- Ergonomically designed for single-handed operation. Featured with accurate graduated scale marking.
- Smooth piston movement offers reduced sliding force.
- Defined position at "0" volume level to feel when piston is completely inserted.
- Defined safety stop to avoid accidental pull-out of plunger and loss of sample.
- Supplied with syringe needles. Packed in individual blister packing.

catalogue number	volume	overall length	pack quantity
094.91.002	2 ml	87 mm	300 pieces
094.91.005	5 ml	87 mm	225 pieces
094.91.010	10 ml	100 mm	150 pieces
094.91.020	20 ml	115 mm	100 pieces

MEMBRANE FILTERS

➤ Membrane filtration offer a very convenient, fast and economical separation method.

They offer below mentioned advantages;

- ✓ Excellent level of particle retention
- ✓ Large load carry capacity
- ✓ High permeability to air
- ✓ Non-hygroscopic and biologically inert
- ✓ Chemical resistance to most solvents and reagents.
- ✓ Very high temperature resistance

CM: cellulose mixed ester membrane
Particularly suitable for aqueous solutions. They are hydrophilic. Thermally stable to 121°C. Ideal for gravimetric analysis and are often used for contamination tests.

PTFE: polytetrafluoroethylene membranes
Particularly suitable with aggressive media, as well as to concentrated acids and bases. They are hydrophobic, they can be used up to 145°C.

NC: nitrocellulose membranes
They are easily wettable and suited for filtration of aqueous solutions. In dry atmosphere these membranes are thermally stable at 125°C and can be autoclaved at 121°C.

PE: polyester membranes
They are hydrophilic. Particularly suitable for fine titration, dust analysis, aerosol analysis and ultra-purification of solvents.

GF/C: glass fibre filter
Suitable for determination of liquid scintillation counting and total suspended solids collection in potable water and in industrial waste. Grade 50C glass fibre filters are hydrophilic and medium / fast, very high loading. They resist temperatures up to 500°C.

RC: regenerated cellulose membranes
These membranes are resistant to most organic solvents. They are mostly used for filtration of solvent mixtures and ultra-purification and degassing of HPLC eluents.

CA: cellulose acetate membranes
They have a low protein binding capacity and they are suited for aqueous and alcoholic media. They are hydrophobic and can be used for hot gases up to 180°C.

catalogue number	membrane material	code name	pore size	type	diameter	pack quantity
104.01.001	cellulose mixed ester	CM	0,20 µm	1	47 mm	100 pieces
104.01.002	cellulose mixed ester	CM	0,45 µm	1	47 mm	100 pieces
104.01.003	nitrocellulose	NC	0,20 µm	1	47 mm	100 pieces
104.01.004	nitrocellulose	NC	0,45 µm	1	47 mm	100 pieces
104.01.005	regenerated cellulose	RC	0,20 µm	1	47 mm	100 pieces
104.01.006	regenerated cellulose	RC	0,45 µm	1	47 mm	100 pieces
104.01.007	polytetrafluoroethylene	PTFE	0,20 µm	1	47 mm	100 pieces
104.01.008	polytetrafluoroethylene	PTFE	0,45 µm	1	47 mm	100 pieces
104.01.009	polyester	PE	0,20 µm	1	47 mm	100 pieces
104.01.010	polyester	PE	0,45 µm	1	47 mm	100 pieces
104.01.011	cellulose acetate	CA	0,20 µm	1	47 mm	100 pieces
104.01.012	cellulose acetate	CA	0,45 µm	1	47 mm	100 pieces
104.01.013	glass fibre	GF/C	1,20 µm	2	47 mm	100 pieces

"A" type needles are designed for optimum penetration with 17° bevel. Also minimizes the necessary piercing force and diameter of injection channel.

"B" type needles has a 90° bevel for precise pipetting. This design relases drops completely, for maximum repreducibility. Ideal for HPLC sample injection.

"C" type needles are designed for autosamplers. The tapered tip and the 90° square end eliminate burns. Ideal for PTFE laminated seals and regular septas.

SYRINGES - *"for dosage of liquids" - "0 dead volume needle" - "serie T"*

Plunger: stainless steel (plunger runs inside the needle)
Barrel: borosilicate glass
Precision: < +/- 1% of the volume
Main use: sample dosage for gas chromatography & dosage of small volume samples & for thin layer chromatography

syringe volume	catalogue number	needle type	catalogue number	needle type	pack quantity
0,5 µl	094.31.005	A	094.32.005	B	1 piece
1,0 µl	094.31.010	A	094.32.010	B	1 piece
2,0 µl	094.31.020	A	094.32.020	B	1 piece
5,0 µl	094.31.050	A	094.32.050	B	1 piece
10 µl	094.31.100	A	094.32.100	B	1 piece
25 µl	094.31.250	A	094.32.250	B	1 piece

SYRINGES - *"for dosage of liquids" – "fixed needle" – "serie FN"*

Plunger: stainless steel
Barrel: borosilicate glass
Precision: < +/- 1% of the volume
Main use: sample dosage for gas chromatography & HPLC valves & autosamplers

syringe volume	catalogue number	needle type	catalogue number	needle type	catalogue number	needle type	pack quantity
5 µl	094.11.005	A	094.12.005	B	094.13.005	C	1 piece
10 µl	094.11.010	A	094.12.010	B	094.13.010	C	1 piece
25 µl	094.11.025	A	094.12.025	B	094.13.025	C	1 piece
50 µl	094.11.050	A	094.12.050	B	094.13.050	C	1 piece
100 µl	094.11.100	A	094.12.100	B	094.13.100	C	1 piece
250 µl	094.11.250	A	094.12.250	B	094.13.250	C	1 piece
500 µl	094.11.500	A	094.12.500	B	094.13.500	C	1 piece

SYRINGES - *"for dosage of liquids" – "removable needle" – "serie RN"*

Plunger: stainless steel
Barrel: borosilicate glass
Precision: < +/- 1% of the volume
Main use: sample dosage for gas chromatography & HPLC valves & autosamplers

syringe volume	catalogue number	needle type	catalogue number	needle type	pack quantity
5 µl	094.21.005	A	094.22.005	B	1 piece
10 µl	094.21.010	A	094.22.010	B	1 piece
25 µl	094.21.025	A	094.22.025	B	1 piece
50 µl	094.21.050	A	094.22.050	B	1 piece
100 µl	094.21.100	A	094.22.100	B	1 piece
250 µl	094.21.250	A	094.22.250	B	1 piece
500 µl	094.21.500	A	094.22.500	B	1 piece

SYRINGES - *"for dosage of gas & liquids" – "fixed needle" – "serie H"*

Plunger: stainless steel with PTFE seal
Barrel: borosilicate glass
Precision: < +/- 1% of the volume
Main use: sample dosage for gas chromatography & HPLC valves & autosamplers & dosage of aggresive fluids

syringe volume	catalogue number	needle type	catalogue number	needle type	pack quantity
5 µl	094.41.005	A	094.42.005	B	1 piece
10 µl	094.41.010	A	094.42.010	B	1 piece
25 µl	094.41.025	A	094.42.025	B	1 piece
50 µl	094.41.050	A	094.42.050	B	1 piece
100 µl	094.41.100	A	094.42.100	B	1 piece
250 µl	094.41.250	A	094.42.250	B	1 piece
500 µl	094.41.500	A	094.42.500	B	1 piece
1,0 ml	094.41.901	A	094.42.901	B	1 piece
2,5 ml	094.41.902	A	094.42.902	B	1 piece
5,0 ml	094.41.905	A	094.42.905	B	1 piece
10,0 ml	094.41.910	A	094.42.910	B	1 piece

SYRINGES - *"for dosage of gas & liquids" – "removable needle" – "serie H"*

Plunger: stainless steel with PTFE seal
Barrel: borosilicate glass
Precision: < +/- 1% of the volume
Main use: sample dosage for gas chromatography & HPLC valves & autosamplers & dosage of aggresive fluids

syringe volume	catalogue number	needle type	catalogue number	needle type	pack quantity
5 µl	094.51.005	A	094.52.005	B	1 piece
10 µl	094.51.010	A	094.52.010	B	1 piece
25 µl	094.51.025	A	094.52.025	B	1 piece
50 µl	094.51.050	A	094.52.050	B	1 piece
100 µl	094.51.100	A	094.52.100	B	1 piece
250 µl	094.51.250	A	094.52.250	B	1 piece
500 µl	094.51.500	A	094.52.500	B	1 piece
1,0 ml	094.51.901	A	094.52.901	B	1 piece
2,5 ml	094.51.902	A	094.52.902	B	1 piece
5,0 ml	094.51.905	A	094.52.905	B	1 piece
10,0 ml	094.51.910	A	094.52.910	B	1 piece

SYRINGES - *"glass" - "with luer-lock"*

- Manufactured from borosilicate glass. Featured with a stainless steel luer-lock system.
- Luer-lock grabs the needle or syringe filter stem and guarantees leak-proof delivery of the liquid even under high pressure.
- Luer-Barrel and the piston can be repeatedly autoclavable.
- Ergonomically designed for single-handed operation.
- Smooth piston movement offers reduced sliding force.

catalogue number	volume	overall length	pack quantity
094.92.001	1 ml	85 mm	1 piece
094.92.005	5 ml	105 mm	1 piece
094.92.010	10 ml	130 mm	1 piece
094.92.020	20 ml	145 mm	1 piece
094.92.050	50 ml	180 mm	1 piece

CHROMATOGRAPHY VIALS & SEPTAS & CAPS

In chromatography a wide variety of vials are used as sample containers. As they are mainly used by automatic instruments strict obedience of all dimensions is essential for trouble-free tests. Besides of these physical properties the vials have to fulfill requirements regarding inertness and cleanliness.

chromatography vials

✔ Vials are either manufactured from glass or plastic. Glass vials are manufactured from 1st hydrolic glass tubings with low expansion coefficient.

✔ Hydrolic glass quality offers perfect resistance to all chemicals and higher hydrolic resistance.

✔ Plastic vials are manufactured from polypropylene with a very good resistance to most of the chemicals and high hydrolic resistance.

vial cap without slit *vial cap with slit*

septas & caps

✔ Sealing units for vials are combination of caps and septas. Caps can be offered either with slit or without slit.

✔ For problem-free and correct results seals should also be inert and uncontaminated.

✔ Almost all septa are laminated on one side with PTFE, which has a high chemical resistance and forms an inert barrier between the sample in the vial and the cap of the septa.

vial packing

✔ Some vials (specially small size ones such as N8, N9 and N11) are packed in a polystyrene boxes.

✔ This kind of packing provides guarantees protection against dust and other enviromental effects.

✔ The glass clear polystyrene box makes the vials always clearly visible at all times.

cap packing

✔ Caps are usually packed in tamper-proof evident zip-locked bags.

✔ These bags allow easy identification of the content due to the transparent P.E material.

✔ The zip-lock enables resealing of the bag after used.

VIALS - "glass" - "screw cap" - "N8"

- Manufactured from hydrolic No:1 glass. Supplied without caps & septas.
- Offers perfect shape, very low dimensional tolerance and exact wall thickness for optimum performance.
- Featured with volume graduations and marking area.

catalogue number	vial dimensions	volume	color	pack quantity
095.00.001	11,6 x 32 mm	1,5 ml	clear	100 pieces
095.00.002	11,6 x 32 mm	1,5 ml	amber	100 pieces

CAPS & SEPTAS - "for N8 vials"

- Offer optimum system performance. Designed to work excellently with needles. All of them are specially sized for proper sealings.
- Packed in tamper-proof evident, transparent, zip-locked bags that allow easy identification.

catalogue number	product specifications	pack quantity
096.00.001	silicone / PTFE - without slit	100 pieces
096.00.002	silicone / PTFE - with slit	100 pieces

VIALS - "glass" - "screw cap" - "N9"

- Manufactured from hydrolic No:1 glass. Supplied without caps & septas.
- Offers perfect shape, very low dimensional tolerance and exact wall thickness for optimum performance.
- Featured with volume graduations and marking area.

catalogue number	vial dimensions	volume	color	pack quantity
095.01.001	11,6 x 32 mm	1,5 ml	clear	100 pieces
095.01.002	11,6 x 32 mm	1,5 ml	amber	100 pieces

CAPS & SEPTAS - "for N9 vials"

- Offer optimum system performance. Designed to work excellently with needles. All of them are specially sized for proper sealings.
- Packed in tamper-proof evident, transparent, zip-locked bags that allow easy identification.

for N9 vials	product specifications	pack quantity
096.01.001	silicone / PTFE - without slit	100 pieces
096.01.002	silicone / PTFE - with slit	100 pieces
096.01.004	silicone / PTFE - cross slit	100 pieces

INSERTS - "glass" "for N8 size vials"

- Manufactured from hydrolic No:1 glass with perfect shape.
- Very low dimensional tolerance and exact wall thickness for perfect fit to vials with N8 neck size.
- Offers perfect solutions for applications where sample volume is limited.

catalogue number	product specifications	volume	vial dimensions	pack quantity
097.05.106	conical bottom	0,1 ml	5,0x31,0 mm	100 pieces
097.05.107	with P.P spring	0,1 ml	5,0x29,0 mm	100 pieces
097.05.108	flat bottom	0,25 ml	5,0x31,5 mm	100 pieces

INSERTS - "glass" "for N9 size vials"

- Manufactured from hydrolic No:1 glass with perfect shape.
- Very low dimensional tolerance and exact wall thickness for perfect fit to vials with N9 neck size.
- Offer perfect solutions for applications where sample volume is limited.

catalogue number	product specifications	volume	vial dimensions	pack quantity
097.05.110	conical bottom	0,2 ml	6,0x31,0 mm	100 pieces
097.05.111	with P.P spring	0,1 ml	5,7x29,0 mm	100 pieces
097.05.109	flat bottom	0,3 ml	5,8x31,5 mm	100 pieces

VIALS - "glass" - "crimp cap" - "N11"

- Manufactured from hydrolic No:1 glass. Supplied without caps & septas.
- Offers perfect shape, very low dimensional tolerance and exact wall thickness for optimum performance.
- Featured with volume graduations and marking area.

catalogue number	vial dimensions	volume	color	pack quantity
095.02.001	11,6 x 32 mm	1,5 ml	clear	100 pieces
095.02.002	11,6 x 32 mm	1,5 ml	amber	100 pieces

CAPS & SEPTAS - "for N11 vials"

- Offer optimum system performance. Designed to work excellently with needles. All of them are specially sized for proper sealings.
- Packed in tamper-proof evident, transparent, zip-locked bags that allow easy identification.

catalogue number	cap type	product specifications	pack quantity
096.02.001	crimp	silicone / PTFE - without slit	100 pieces
096.02.002	crimp	rubber / TEF - without slit	100 pieces

VIALS - "glass" - "screw cap" - "N13"

- Manufactured from hydrolic No:1 glass with perfect shape, very low dimensional tolerance and exact wall thickness for optimum performance.

catalogue number	vial dimensions	volume	color	pack quantity
095.05.001	14,75 x 45 mm	4,0 ml	clear	100 pieces
095.05.002	14,75 x 45 mm	4,0 ml	amber	100 pieces

CAPS & SEPTAS

- Offer optimum system performance. Designed to work excellently with needles. All of them are specially sized for proper sealings. Packed in tamper-proof evident, transparent, zip-locked bags.

catalogue number	product specifications	pack quantity
096.05.003	silicone / PTFE - without slit	100 pieces
096.05.004	rubber / FEP - without slit	100 pieces

VIALS - "glass" - "screw cap" - "N15"

- Manufactured from hydrolic No:1 glass with perfect shape, very low dimensional tolerance and exact wall thickness for optimum performance.

catalogue number	vial dimensions	volume	color	pack quantity
095.06.001	18,5 x 66 mm	12,0 ml	clear	100 pieces
095.06.002	18,5 x 66 mm	12,0 ml	amber	100 pieces

CAPS & SEPTAS

- Offer optimum system performance. Designed to work excellently with needles. All of them are specially sized for proper sealings.
- Packed in tamper-proof evident, transparent, zip-locked bags that allow easy identification.

catalogue number	product specifications	pack quantity
095.06.003	white septum / beige PTFE - without hole	100 pieces

VIALS - "glass" - "screw cap" - "N20"

➤ Manufactured from hydrolic No:1 glass. Supplied without caps & septas.

➤ Offers perfect shape, very low dimensional tolerance and exact wall thickness for optimum performance.

catalogue number	vial dimensions	volume	color	pack quantity
095.03.001	22,7 x 86,0 mm	22,0 ml	clear	100 pieces
095.03.002	22,7 x 86,0 mm	22,0 ml	amber	100 pieces

CAPS & SEPTAS - "for N20 vials"

➤ Offer optimum system performance. Designed to work excellently with needles. All of them are specially sized for proper sealings.

➤ Packed in tamper-proof evident, transparent, zip-locked bags that allow easy identification.

catalogue number	product specifications	pack quantity
096.05.001	silicone / PTFE - without hole	100 pieces

VIALS - "glass" - "crimp cap" - "N20"

➤ Manufactured from hydrolic No:1 glass. Supplied without caps & septas.

➤ Offers perfect shape, very low dimensional tolerance and exact wall thickness for optimum performance.

catalogue number	vial dimensions	volume	color	pack quantity
095.03.003	20,5 x 54,5 mm	10,0 ml	clear	100 pieces
095.03.004	20,5 x 54,5 mm	10,0 ml	amber	100 pieces
097.03.001	22,5 x 46,0 mm	10,0 ml	clear	100 pieces
097.03.002	22,5 x 46,0 mm	10,0 ml	amber	100 pieces
097.04.001	22,5 x 75,5 mm	20,0 ml	clear	100 pieces
097.04.002	22,5 x 75,5 mm	20,0 ml	amber	100 pieces

CAPS & SEPTAS - "for N20 crimp vials"

➤ Offer optimum system performance. Designed to work excellently with needles. All of them are specially sized for proper sealings.

➤ Packed in tamper-proof evident, transparent, zip-locked bags that allow easy identification.

catalogue number	product specifications	pack quantity
096.03.001	silicone / PTFE - without slit	100 pieces

VIALS - "glass" - "screw cap" - "N24"

➤ Manufactured from hydrolic No:1 glass. Supplied without caps & septas.

➤ Offers perfect shape, very low dimensional tolerance and exact wall thickness for optimum performance.

catalogue number	vial dimensions	volume	color	pack quantity
095.03.011	27,5 x 95,0 mm	40,0 ml	clear	100 pieces
095.03.012	27,5 x 95,0 mm	40,0 ml	amber	100 pieces

CAPS & SEPTAS - "for N24 vials"

➤ Designed to work excellently with needles. Specially sized for proper sealings. Packed in tamper-proof evident, transparent, zip-locked bags that allow easy identification of interior.

catalogue number	product specifications	pack quantity
096.05.011	silicone / PTFE - without hole	100 pieces
096.05.012	silicone / PTFE - with hole	100 pieces

Offers adjustable crimping pressure by an easily accessible and well visible knob on the crimping head.

CRIMPERS & DECAPPERS - "manual"

➤ Manual crimpers and decappers are much lighter than the standard alternatives. They never create fatigue after long extended working periods.

➤ Ergonomical design offers improved comfort over blocky metal grips.

➤ Offers adjustable crimping pressure by a easily accessible and well visible knob on the crimping head.

➤ Activated by bottom handle motion guarantees faster and safer hold of the tool during crimping.

➤ Due to the design of the crimper head better vertical clearance over the vial is assured.

Bottom pull handle design for faster and safer hold of the tool during crimping and decapping.

catalogue number	product descriptions	pack quantity
097.01.011	crimper - for N 11 caps	1 piece
097.01.020	crimper - for N 20 caps	1 piece
097.02.011	decapper - for N 11 caps	1 piece
097.02.020	decapper - for N 20 caps	1 piece

RACKS / WORKSTATIONS *"for vial"*

- Manufactured from polycarbonate with high mechanical strength.
- Uniquely designed to carry 50 pieces of 2,0 ml & 5,0 ml volume vials in 10 x 5 array.
- Optimum design of the wells keeps the vials at their positions firmly and vertical.
- Alphanumerical index on vial rows enables easy identification of vial positions.
- Featured with a frosted write on and labelling area at the front side of the workstation.

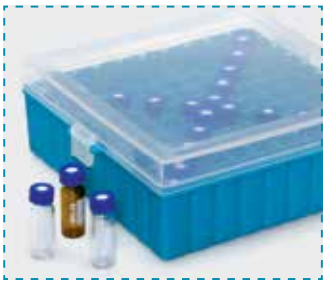
Racks can be stacked both empty or with vials on top of each other for space saving solutions.

catalogue number	for vials diameter	well quantity	vial array	L x W x H	rack color	pack quantity
095.95.001	11,60 mm	50	5 x 10	110x195x22 mm	blue	1 piece
095.95.002	14,75 mm	50	5 x 10	115x240x30 mm	dark blue	1 piece

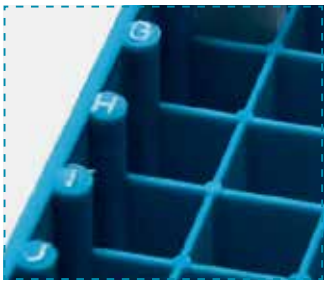
TUBE BOX - *"100 well" - "hinged lid"*

- Manufactured from autoclavable polypropylene with high mechanical strength.Guarantees high temperature resistance between -20°C to +121°C.
- Uniquely designed to carry 100 vials with 11,0 - 12,0 mm diameter in 10 x 10 array. Easily stackable for reducing storage space.
- Hinged lid with built-in stop allows easy one-handed operation and access to vials.
- Clear box lid enables easy identification of box content and protects the vials from dust and other enviromental effects.
- Different color options offer visual sorting and organising of different vials.
- Alphanumerical index both on tube rows and the lid enables easy identification of tube positions.

catalogue number	lid type	for vials diameter	well quantity	vial array	L x W x H	rack color	pack quantity
080.01.002B	hinged	11,6 mm	100	10 x 10	141x151x53 mm	blue	1 piece
080.01.002P	hinged	11,6 mm	100	10 x 10	141x151x53 mm	purple	1 piece
080.01.002R	hinged	11,6 mm	100	10 x 10	141x151x53 mm	ruby	1 piece



Clear box lid provides protection of vials from environmental effects.



Alphanumerical index enables easy identification of vial positions.

Different colors offer visual sorting and organising of different samples.

Corners frames enable perfect stacking on each other without sliding.

CUVETTES - "polystyrene" - "12,5 x 12,5 x 45 mm"

- Manufactured from glass-clear polystyrene with 12,5 x 12,5 x 45 mm overall dimensions as single use.
- Can be both used for chemistry and life science applications.
- Wavelength operating range from 340 to 900 nm. Offers a light path of 10 mm with clear and clean optical path length.
- Optimised shape and narrow wall thickness provide increased heat transfer resulting in more constant sample temperatures during measurements.
- Groupped by mould cavity and packed in same box to ensure lowest variation of absorbtion coefficient.
- Eliminates cross contamination risk associated with washing and re-using such as glass cuvettes.
- **Available 2 cuvettes:**
  - **Macro cuvettes**
  - **Semi-micro cuvettes**
- Supplied as 100 cuvettes packed in a styrofoam box with a cover.

catalogue number	cuvette type	product descriptions	material	wavelength range	light path	volume	internal width	pack quantity
098.02.002	macro	with clear wall & without cap	polystyrene	340 - 900 nm	10 mm	2,5-4,5 ml	10 mm	100 pieces
098.02.001	semi-micro	with clear wall & without cap	polystyrene	340 - 900 nm	10 mm	1,5-3,0 ml	4 mm	100 pieces

CUVETTES - "glass" - "12,5 x 12,5 x 45 mm"

- Manufactured from polished quartz glass or polished optical glass with 12,5 x 12,5 x 45 mm dimensions as multi-use.
- They offer clear and clean optical path length and fit to all standard spectrophotometer cuvette holders.
- Can be both used for chemistry and life science applications.
- Quartz cuvettes provide wavelength operating range from 190 to 2.500 nm.
- Optical glass cuvettes provide wavelength operating range from 340 to 2.500 nm.
- Optimised shape, precise dimensions with tolerance less than 0,1 % mm and excellent wall thickness provide accurate resulting during measurements.
- **Available 3 cuvettes:**
  - **Macro cuvettes**
  - **Semi-micro cuvettes**
  - **Micro cuvettes**
- Supplied as 2 cuvettes packed in a polystyrene box for protection from dust and other enviromental effects.

catalogue number	cuvette type	product descriptions	material	wavelength range	light path	volume	internal width	pack quantity
098.01.001	macro	with clear wall & PTFE cap	ES Quartz	190 - 2500 nm	10 mm	3,50 ml	10 mm	2 pieces
098.01.002	semi-micro	with frosted wall & PTFE cap	ES Quartz	190 - 2500 nm	10 mm	1,40 ml	4 mm	2 pieces
098.01.003	micro	with frosted wall & PTFE cap	ES Quartz	190 - 2500 nm	10 mm	0,70 ml	2 mm	2 pieces
098.01.004	macro	with clear wall & PTFE cap	optical glass	340 - 2500 nm	10 mm	3,50 ml	10 mm	2 pieces
098.01.005	semi-micro	with frosted wall & PTFE cap	optical glass	340 - 2500 nm	10 mm	1,40 ml	4 mm	2 pieces
098.01.006	micro	with frosted wall & PTFE cap	optical glass	340 - 2500 nm	10 mm	0,70 ml	2 mm	2 pieces

CUVETTES - "glass" - "12,5 x 52,5 x 45 mm"

- Manufactured from polished quartz glass or polished optical glass with 12,5 x 52,5 x 45 mm dimensions as multi-use for chemistry and life science applications.
- They offer clear and clean optical path length and fit to all standard spectrophotometer cuvette holders.
- Quartz cuvettes provide wavelength operating range from 190 to 2.500 nm.
- Optical glass cuvettes provide wavelength operating range from 340 to 2.500 nm.
- Optimised shape, precise dimensions with tolerance less than 0,1 % mm and excellent wall thickness provide accurate resulting during measurements.
- **Available 3 cuvettes:**
  - **Macro cuvettes**
  - **Semi-micro cuvettes**
  - **Micro cuvettes**
- Supplied as 2 cuvettes packed in a polystyrene box for protection from dust and other enviromental effects.

catalogue number	cuvette type	product descriptions	material	wavelength range	light path	volume	internal width	pack quantity
098.01.007	macro	with clear wall & PTFE cap	ES Quartz	190 - 2500 nm	50 mm	17,5 ml	10 mm	1 piece
098.01.008	semi-micro	with frosted wall & PTFE cap	ES Quartz	190 - 2500 nm	50 mm	7,00 ml	4 mm	2 pieces
098.01.009	micro	with frosted wall & PTFE cap	ES Quartz	190 - 2500 nm	50 mm	3,50 ml	2 mm	2 pieces
098.01.010	macro	with clear wall & PTFE cap	optical glass	340 - 2500 nm	50 mm	17,5 ml	10 mm	1 piece
098.01.011	semi-micro	with frosted wall & PTFE cap	optical glass	340 - 2500 nm	50 mm	7,00 ml	4 mm	2 pieces
098.01.012	micro	with frosted wall & PTFE cap	optical glass	340 - 2500 nm	50 mm	3,50 ml	2 mm	2 pieces

BOX - "for cuvettes"

Different color options offer visual sorting and organising of different cuvettes.

- Manufactured from polypropylene with 120x112x60 mm dimensions for safe handling and holding 12 cuvettes with 10 mm width.
- Hinged lid secures clasps and offers convenient use of the box. Removable cuvette insert helps easy cleaning.
- The inside height designed to accomodate all cuvettes.

catalogue number	box color	pack quantity
098.03.001B	blue	1 piece
098.03.001P	purple	1 piece
098.03.001R	ruby	1 piece

RACK - "for cuvettes"

- Manufactured from polypropylene with 210x70x35 mm dimensions for safe handling and holding 16 cuvettes with 10 mm width.
- Alphanumerical index on cuvette rows enables easy identification of tube positions.
- 2 tier body form offers clear visibility option from horizontal direction.

catalogue number	box color	pack quantity
098.03.002B	blue	1 piece
098.03.002P	purple	1 piece
098.03.002R	ruby	1 piece

TLC SEPARATION TANK

➤ TLC developing tanks are used to run up to 5 TLC plates for separation. The tank can be equilibrated for 30 minutes prior to running the plate to yield good result. TLC Developing tank supplied to gather with the lid.

➤ Rectangular shaped TLC developing tanks are used to develop 20x20 cm TLC plates.

catalogue number	pack quantity
108.01.016	1 piece

TLC PLATES

➤ Silica 60, specific surface (BET) - 500 m2/g, mean pore size 60A, specific pore volume 0,75 ml/g, particle size 5 - 17 µm standard grade. Binders: highly polimeric products, which are stable in almost all organic solvents and resistant towards aggressive visualisation reagents.

catalogue number	product descriptions	material	dimensions	thickness of layer	pack quantity
108.01.001	TLC precoated plates SIL G-25	glass sheet	20 x 20 cm	0,25 mm	25 pieces
108.01.015	ALUGRAM" Xtra"sheets SIL G / UV 254	aluminium sheet	20 x 20 cm	0,20 mm	25 pieces

TLC SPRAY KIT

➤ Offers an economical solution for TLC spraying. Provides a fine uniform spray ideally adjusted for TLC practices.

➤ Supplied complete with 100 ml erlenmeyer with sprayer head and a rubber pressure bellow.

catalogue number	pack quantity
108.02.002	1 piece

TLC SPRAYER - *"with gas canister"*

➤ TLC sprayer provide a fine, uniform spray all over the TLC plate surfaces for optimization of TLC plates.

➤ With it's unique design offer easy-to-use and easy-to-clean options.

➤ Based on a simple technology where the aeresol canister is situated above the reservoir bottle.

➤ A small press of the lever highly pressuries the lower glass reservoir bottle releasing a fine mist of spray.

➤ Propellant mixture is eco-friendly and does not harms the nature.

➤ Guarantees homogenous distribution, even coverage and minimum reagent consumption.

➤ Gas canister serves as handle. Cap fits to all 38 - 40 thread reagent bottles.

catalogue number	pack quantity
108.02.001	1 piece

Filling: *Pour the TLC reagent into the bottle. Never fill above the shoulder line.*

Mounting: *Attach TLC sprayer to the bottle by turning anti-clockwise. Never shake the sprayer during mounting.*

Spraying: *Start spraying with the sprayer and release the button while the sprayer is still moving at the end of the TLC plate to avoid reagent loss. For best performance a spraying angle between 90° and 45° is required.*

Also always hold the sprayer at a distance between 15 cm to 30 cm from TLC plate surface.