



ZeroSept®

Vials

Septa & Closures

ZerOSept®



from

LABC-Labortechnik

Catalogue Nr.: 152



## ZeroSept® closures

High purity, high quality closures  
with pure, blank septa

LABC Laboratory Technology defines its innovative, high-purity and high-quality closures for trace analysis applications as ZeroSept® closures. Only absolutely pure septa, i.e. septa with as little blank value as possible, are awarded the „ZeroSept®“ label. The target is a chromatogram free of interfering peaks as if the needle had never pierced a septum.

LABC-Labortechnik currently awards the „ZeroSept®“ rating to the following septa varieties:

1. ZeroSept® ALUmono-O - with O-ring (fluoroplastic) + puRemaining, thin aluminium foil
2. ZeroSept® PTFEmono - with puRemaining, thin aluminium foil
3. ZeroSept® PTFEmono -O ▸ with O-ring (fluoroplastic) + puRemaining, thin PTFE foil
4. ZeroSept® SILP - with a high-purity silicone compound (natural silicone/colorless PTFE) - low alkane
5. ZeroSept® AIR-PTFE - the high purity „PTFEvirginal/AIR/PTFEvirginal“ septum, also ideal for multiple injections

**ZeroSept® ALUmono-O** are closures consisting of a pure aluminium septum. The septum is held inside the cap by an O-ring. This prevents the septum from falling out of the cap and ensures a higher tightness. ZeroSept® ALUmono-O are available in the following versions. Special, not listed, sizes are available on request.

### ND11 ZeroSept® ALUmono-O crimp cap closure:

ND11 aluminum crimp cap, painted, with hole and groove (anti-capillary barrier)\*, fluoroplastic O-ring\*\* and an aluminum foil as phthalate-free septum

\*prevents the septum from falling out of the ND11 cap during transport!

\*\*optimum tightness without readjustment of the crimping tool!

Article n°	Thickness [mm]	HoleØ [mm]	Colour (cap)
120-0401951	1,1	5,5	Colourless
Unit = 100 pcs. in a glass jar with screwed closing and a PTFE gasket			



**ZeroSept® PTFEmono** are closures consisting of a pure PTFE septum. The thin PTFE film is inserted into the closure in a single layer. It is not held in place by an O-ring and is therefore less leak-proof than mono-O versions. ZeroSept® PTFEmono are available in the following versions. Special, not listed, sizes are available on request.

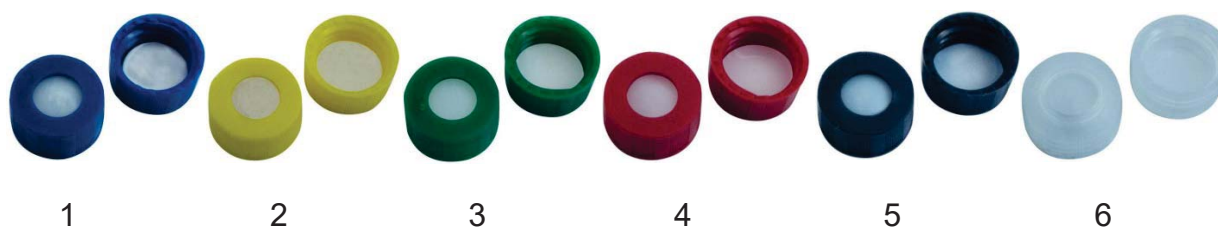
### ND9 ZeroSept® PTFEmono PP-threaded closure:

PP screw cap with PTFE virginial film

- moderate sealing and re-sealing properties
- only recommended for non-critical HPLC applications
- frequently used by Merck/Hitachi and Waters

Article n°	Thickness [mm]	HoleØ [mm]	Colour (cap)	Picture
120-0590853	0,25	6	blue	1
120-0591065	0,25	6	yellow	2
120-0591089	0,25	6	green	3
120-0591096	0,25	6	red	4
120-0591072	0,25	6	black	5
120-0590990	0,25	6	colourless	6

Unit = 100 pcs. in a glass jar with screwed closing and a PTFE gasket



### ND9 LABC-ZeroSEPT® PTFEmono- PP-threaded magnetic:

PP screw cap with PTFE film virginial

- moderate sealing and re-sealing properties
- only recommended for non-critical HPLC applications
- for CTC-Autosampler
- in the design of an aluminium flanged cap; therefore also suitable for robot gripper arms

Article n°	Thickness [mm]	HoleØ [mm]	Colour (cap)
120-0891967	0,25	6	gold

Unit = 100 pcs. in a glass jar with screwed closing and a PTFE gasket



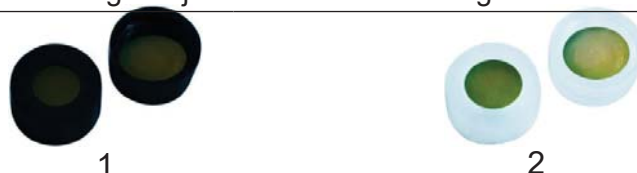
**ZeroSept® SILP** are high purity silicone closures. Our silicone is a new and particularly clean compound and ensures low noise peak measurements. The silicone septa are laminated with a PTFE barrier film. With 38° Shore the septum is also very soft. ZeroSept® SILP are available in the following versions. Special, not listed, sizes are available on request.

### ND8 ZeroSept® SILP closure:

ND8 PP threaded cap (thread 8-425) with silicone natural / PTFE colorless (ultrapure)

- Very soft
- Ideal for inorganic analyses
- only a few alkanes
- tempered and elaborately washed

Article n°	Thickness [mm]	HoleØ [mm]	Colour (cap)	Bild
120-0891059	1,2	5,5	black	1
120-0890113	1,2	5,5	white	2
Unit = 100 pcs. in a glass jar with screwed closing and a PTFE gasket				

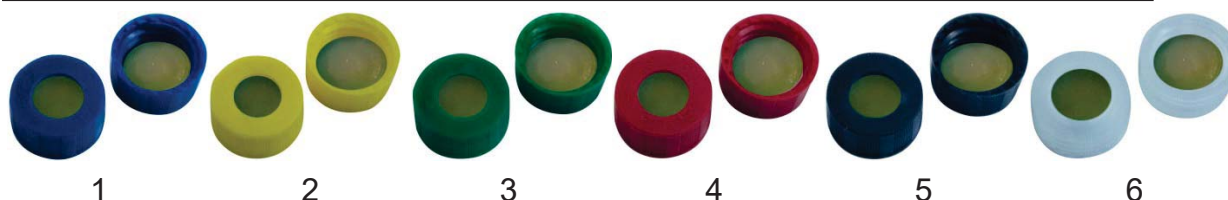


### ND9 ZeroSept® SILP closure:

ND9 PP short thread cap with silicone natural / PTFE colorless (ultrapure)

- very soft
- Ideal for inorganic analyses
- only a few alkanes
- tempered and elaborately washed
- in the design of an aluminium flanged cap; therefore also suitable for robot gripper arms

Article n°	Thickness [mm]	HoleØ [mm]	Colour (cap)	Bild
120-0891028	1,2	6	blue	1
120-0916257	1,2	6	yellow	2
120-0891035	1,2	6	green	3
120-0916226	1,2	6	red	4
120-0916233	1,2	6	black	5
120-0890106	1,2	6	colourless	6
Unit = 100 pcs. in a glass jar with screwed closing and a PTFE gasket				

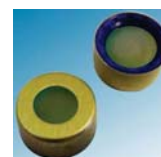


## ND9 ZeroSept® SILP - magnetic closure:

ND9 PP short thread cap, magnetic, with silicone natural /PTFE colourless (ultrapure)

- very soft
- ideal for inorganic analyses
- only a few alkanes
- tempered and elaborately washed
- for CTC-Autosampler
- in the design of an aluminium flanged cap; therefore also suitable for robot gripper arms

Article n°	Thickness [mm]	HoleØ [mm]	Colour (cap)
120-0891080	1,2	6	gold
Unit = 100 pcs. in a glass jar with screwed closing and a PTFE gasket			

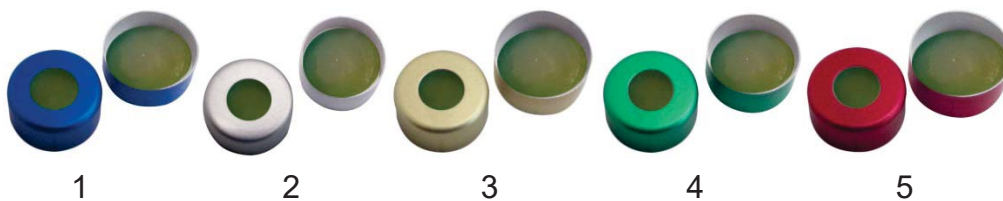


## ND11 ZeroSept® SILP - closure:

ND11 Aluminium crimp cap, painted, with silicone natural /PTFE colourless (ultrapure)

- very soft
- Ideal for inorganic analyses
- only a few alkanes
- tempered and elaborately washed
- for CTC-Autosampler

Article n°	Thickness [mm]	HoleØ [mm]	Colour (cap)	Bild
120-0916141	1,2	5,5	blue	1
120-0890090	1,2	5,5	colourless	2
120-0916158	1,2	5,5	gold	3
120-0916127	1,2	5,5	green	4
120-0916134	1,2	5,5	red	5
Unit = 100 pcs. in a glass jar with screwed closing and a PTFE gasket				



### ND18 ZeroSept® SILP - magnetic closure:

Magnetic fine thread screw cap made of steel and silicone natural /PTFE colourless (ultrapure) septum

- very soft
- ideal for inorganic analyses
- only a few alkanes
- tempered and elaborately washed
- for CTC-Autosampler
- in the design of an aluminium flanged cap; therefore also suitable for robot gripper arms

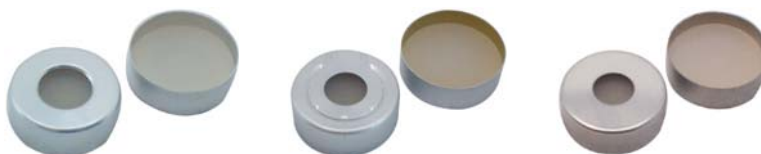
Article n°	Thickness [mm]	HoleØ [mm]	Colour (cap)
		8	silver
Unit = 100 pcs. in a glass jar with screwed closing and a PTFE gasket			

### ND20 ZeroSept® SILP closure:

Aluminium crimp cap, painted and silicone natural /PTFE colourless (ultrapure) septum

- very soft
- ideal for inorganic analyses
- only a few alkanes
- tempered and elaborately washed
- for CTC-Autosampler
- in the design of an aluminium flanged cap; therefore also suitable for robot gripper arms

Article n°	Thickness [mm]	HoleØ [mm]	Colour/Cap
120-0891073	3,2	10	clourless
120-0891622	3,2	10	overpressure predection
120-0891615	3,2	10	magnetic
Unit = 100 pcs. in a glass jar with screwed closing and a PTFE gasket			



## ND24 ZeroSept® SILP - closure:

ND24 PP screw cap with silicone natural /PTFE colourless (ultrapure)

- very soft
- ideal for inorganic analyses
- only a few alkanes
- tempered and elaborately washed
- for EPA vials

Article n°	Thickness [mm]	HoleØ [mm]	Colour (cap)
120-0891097	1,2	12,5	white
Unit = 100 pcs. in a glass jar with screwed closing and a PTFE gasket			



## Packaging:

All ZeroSept® closures are supplied in a glass jar. The jar is closed with a PP screw cap with integrated laminated PTFE-seal. A clean aluminum foil is also placed between the gasket and the closure to ensure that the septa arrive at the customer's site free of environmental influences and free of plasticizers from the packaging. In addition, the aluminum foil stabilizes the closure and pre-vents the septa from coming loose during transport.

100 caps are filled in each jar.







## Vial closures with ZeroSept® AIR-Septum “PTFE<sub>virginal</sub>/AIR/PTFE<sub>virginal</sub>”

The new septum seal with an air cushion instead of an elastomer for standard vial closures. Due to its innovative design, the ZeroSept® AIR septum PTFE<sub>virginal</sub>/AIR/PTFE<sub>virginal</sub> achieves high tightness, even with multiple injections!

The double PTFE film without any elastomer content makes the septum highly pure and very inert, remaining for trace analysis, among other things. It fits, in combination with our standard vials, in all common GC/HPLC systems and can be moved in the magnetic version with your autosampler.

### Leak test of ZeroSept® AIR (PTFE/AIR/PTFE) sealed headspace vials filled with acetone

Procedure: 20ml headspace vials each were filled with 15ml acetone and closed with fine-thread screw caps containing 4 different septa materials. The closed vials were punctured with an injection needle (AD0.47 mm) and stored at 23°C. The gross weight (double determination) was measured as a function of time.

	1A	1B	2A	2B	3A	3B	4A	4B
time [h]	PTFE/AIR/PTFE		Sil white/PTFE blue		Butyl red / PTFE grey		Formscheibe dunkel/PTFE	
0	29,27	29,03	28,82	28,85	29,08	29,09	29,12	29,15
1,5	29,26	29,03	28,82	28,85	29,08	29,09	29,12	29,15
24	29,20	29,00	28,82	28,84	29,08	29,09	29,11	29,15
78,5	29,11	28,94	28,80	28,82	29,08	29,08	29,08	29,11
102,5	29,06	28,91	28,80	28,82	29,08	29,08	29,07	29,10
145,5	28,99	28,87	28,79	28,81	29,08	29,08	29,05	29,08



Additional information about the ZeroSept® AIR-Septum on [www.LABC.de](http://www.LABC.de)

## ND11 ZeroSept®AIR closure:

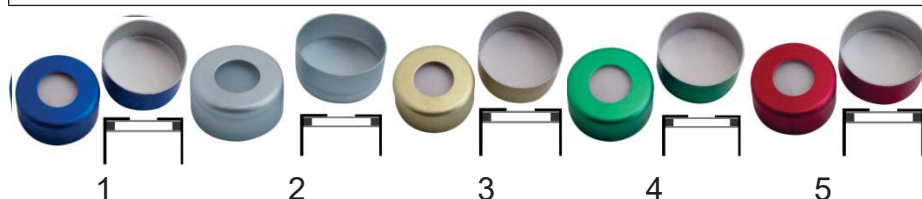
Aluminium crimp cap, painted, with anti-capillary barrier\* and PTFEvirginal/AIR/PTFEvirginal-septum

\*prevents the septum from falling out of the N11 cap during transport!

- excellent sealing property
- phthalate-free closure
- Elastomer-, silicone- and halogen-free
- consists completely only of virgin PTFE
- no punching of elastomer septum particles by syringe cannula possible
- for liquid-liquid extractions (e.g. MOSH MOAH)
- suitable for trace analysis and multiple injections

Article n°	Thickness [mm]	HoleØ [mm]	Colour (cap)	Picture
120-0916639	1,2	5,5	blue	1
120-0916608	1,2	5,5	colourless	2
120-0916653	1,2	5,5	gold	3
120-0916615	1,2	5,5	green	4
120-0916622	1,2	5,5	red	5

Unit = 100 pcs. in a glass jar with screwed closing and a PTFE gasket



## ND18 ZeroSept®AIR closure:

Magnetic fine thread screw cap made of steel and PTFEvirginal/AIR/PTFEvirginal-Septum

- excellent sealing property
- phthalate-free closure
- Elastomer-, silicone- and halogen-free
- consists completely only of virgin PTFE
- no punching of elastomer septum particles by syringe cannula possible
- for liquid-liquid extractions (e.g. MOSH MOAH)
- suitable for trace analysis and multiple injections

Article n°	Thickness [mm]	HoleØ [mm]	Colour (cap)
120-0916660	2,5	8	silver

Unit = 100 pcs. in a glass jar with screwed closing and a PTFE gasket

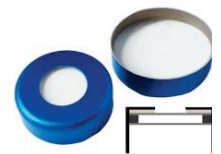


## ND20 ZeroSept®AIR closure:

Aluminium flared cap + magnetic ring and PTFEvirginal/AIR/PTFEvirginal-Septum

- excellent sealing property
- phthalate-free closure
- Elastomer-, silicone- and halogen-free
- consists completely only of virgin PTFE
- no punching of elastomer septum particles by syringe cannula possible
- for liquid-liquid extractions (e.g. MOSH MOAH)
- suitable for trace analysis and multiple injections

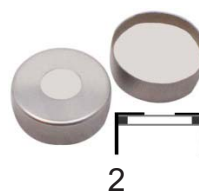
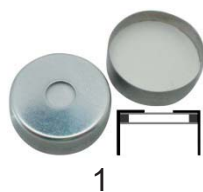
Article n°	Thickness [mm]	HoleØ [mm]	Colour (cap)
120-0916714	2,8	8	blue
Unit = 100 pcs. in a glass jar with screwed closing and a PTFE gasket			



Steel crimp cap, magnetic, painted and PTFEvirgin/AIR/PTFEvirgin-Septum

- excellent sealing property
- phthalate-free closure
- Elastomer-, silicone- and halogen-free
- consists completely only of virgin PTFE
- no punching of elastomer septum particles by syringe cannula possible
- for liquid-liquid extractions (e.g. MOSH MOAH)
- suitable for trace analysis and multiple injections

Article n°	Thickness [mm]	HoleØ [mm]	Colour/Cap	Pic
120-0916691	2,5	6	steel silver magnetic	1
120-0916707	2,5	8	steel silver magnetic	2
Unit = 100 pcs. in a glass jar with screwed closing and a PTFE gasket				



Aluminium crimp cap, painted and PTFEvirginal/AIR/PTFEvirginal-Septum

- phthalate-free closure
- Elastomer-, silicone- and halogen-free
- consists completely only of virgin PTFE
- no punching of elastomer septum particles by syringe cannula possible
- for liquid-liquid extractions (e.g. MOSH MOAH)
- suitable for trace analysis and multiple injections

Article n°	Thickness [mm]	HoleØ [mm]	Colour/Cap	Pic
120-0916677	2,5	10	clourless	1
120-0916738	2,5	10	colourless complete tear-off	2
120-0916721	2,5	10	colourless tear-off	3
120-0916684	2,5	10	overpressure predection	4

Unit = 100 pcs. in a glass jar with screwed closing and a PTFE gasket



# Standard closures

Standard closures of the LABC laboratory technology are compatible with the common analysis systems. They are manufactured to a high standard in Germany.

## ND9 PP- Screw hole cap - RedRubber / PTFE(beige)

Art.-Nr.:	Colour	Thickness [mm]	HoleØ [mm]	
120-0591003	colourless	1,0	6	1
120-0591010	blue	1,0	6	2
120-0591027	red	1,0	6	3
120-0591034	black	1,0	6	4
120-0591041	green	1,0	6	5
120-0591058	yellow	1,0	6	6
VPE= 100 pieces in PE bag, Temperature range: -40°C - 150°C Hardness: 45° shore A				

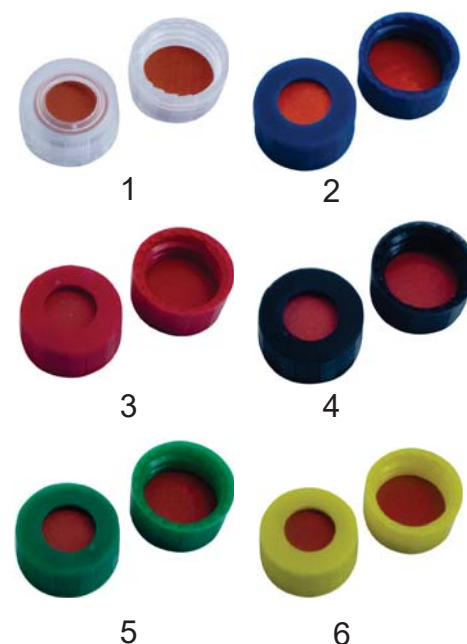
Purity comparable to silicone, recommended for single injections  
Temperature range: -40 °C - 150 °C  
45° shore A



## PP screw cap - natural rubber (red-orange)/TEF (colourless)

Ideal for multiple injections  
Temperature range: -40 °C - 120 °C  
60° shore A

Art.-Nr.:	Colour:	Thickness:	HoleØ	
120-0590860	colourless	1,0 mm	6 mm	1
120-0590808	blue	1,0 mm	6 mm	2
120-0590822	red	1,0 mm	6 mm	3
120-0590839	black	1,0 mm	6 mm	4
120-0590815	green	1,0 mm	6 mm	5
120-0590792	yellow	1,0 mm	6 mm	6



Packing unit = 100 pcs. in PE-bag

## ND9 PP- Screw hole cap -Silicone (white) / PTFE(red)

Art.-Nr.:	Colour	Thickness [mm]	HoleØ [mm]	
120-0590877	colourless	1,0	6	1
120-0590709	blue	1,0	6	2
120-0590907	red	1,0	6	3
120-0590761	black	1,0	6	4
120-0590723	green	1,0	6	5
120-0590716	yellow	1,0	6	6



Ideal for critical analysis, recommended for single injections  
Temperature range: -60 °C - 200 °C  
55° shore A

## PP- Screw hole cap - Silicone / PTFE, UltraBond

In an UltraBond closure system, the screw cap and septum are inseparable. The molecular structure of the contact surface between the PP screw cap and the septum is altered, creating a bond without the use of adhesives.

45° shore A

Art.-Nr.:	Colour	Thickness	HoleØ	Septa:	Phillips-head:
120-0590754	blue	1,3 mm	6 mm	white / red	no
120-0590976	blue	1,0 mm	6 mm	white / white	no
120-0590983	blue	1,0 mm	6 mm	white / white	yes

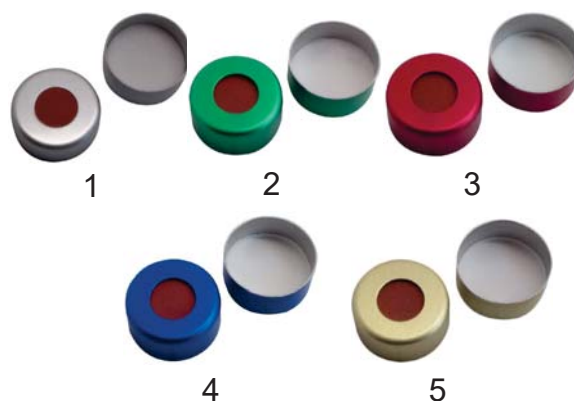


Packing unit = 100 pcs. in PE-bag

## ND11 Aluminium crimp cap - RedRubber/PTFE (beige)

Preferably recommended for single injections, purity comparable to silicone. Application in GC and HPLC. Septum is tested for instrument manufacturer quality.  
Temperature range: -40 °C - 150 °C  
Hardness: 45° shore A

Art.-Nr.:	Colour:	Thickness:	Hole-Ø:	
120-0587150	silver	1,0 mm	5,5 mm	1
120-0587167	green	1,0 mm	5,5 mm	2
120-0587174	red	1,0 mm	5,5 mm	3
120-0587181	blue	1,0 mm	5,5 mm	4
120-0587198	gold	1,0 mm	5,5 mm	5

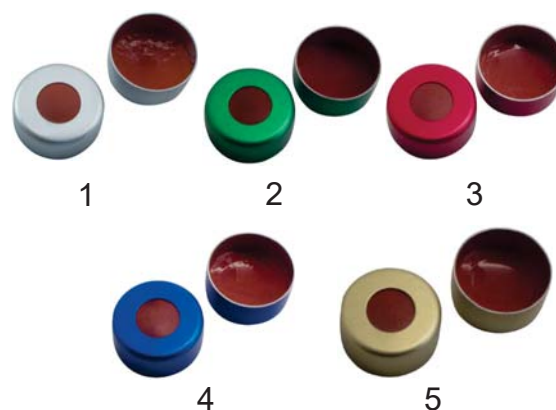


Packing unit = 100 pcs. in PE-bag

## ND11 Aluminium crimp cap - natural rubber (red-orange)/butyl/TEF (colourless)

Ideal for multiple injections, easier to pierce than natural rubber/TEF closures, sandwich disc, combination of good physical properties (resealing properties) with good chemical properties (purity).  
temperature range: -40 °C - 120 °C  
45° shore A

Art.-Nr.:	Colour:	Thickness:	Hole-Ø:	
120-0587075	silver	1,0 mm	5,5 mm	1
120-0587099	green	1,0 mm	5,5 mm	2
120-0587105	red	1,0 mm	5,5 mm	3
120-0647502	blue	1,0 mm	5,5 mm	4
120-0673983	gold	1,0 mm	5,5 mm	5



Packing unit = 100 pcs. in PE-bag



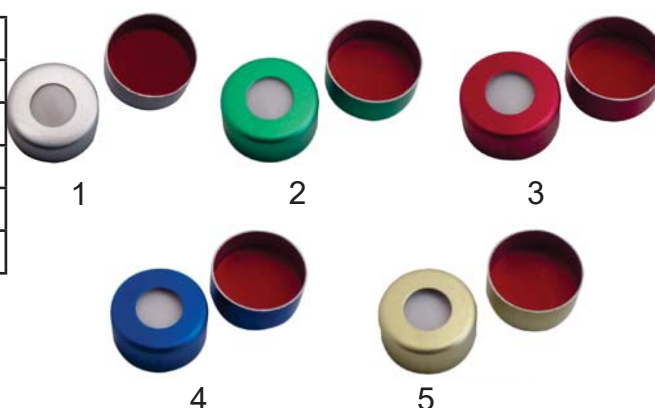
## ND11 Aluminium crimp cap - Silicone (white)/PTFE (red)

Preferably recommended for one-time injections, purest synthetic elastomer, therefore suitable for critical analyses Application in GC, HPLC and headspace analysis.

Temperature range: -60 °C - 200 °C

Hardness: 45° shore A

Art.-Nr.:	Colour:	Thickness:	Hole-Ø:	
120-0587051	silver	1,3 mm	5,5 mm	1
120-0587204	green	1,3 mm	5,5 mm	2
120-0587211	red	1,3 mm	5,5 mm	3
120-0587228	blue	1,3 mm	5,5 mm	4
120-0587235	gold	1,3 mm	5,5 mm	5



Packing unit = 100 pcs. in PE-bag

## ND11 Aluminium crimp cap - PTFE/Silicone/PTFE

Silicone discs coated on both sides with PTFE for low particle formation.

Temperature range: -60 °C - 200 °C

Art.-Nr.:	Colour:	Septa:	Thickness:	Hole-Ø:	Hardness:
120-0017237	silver	PTFE red/Silicon white/PTFE red	1,0 mm	5,5 mm	45° shore A



Packing unit = 100 pcs. in PE-bag

## ND11 Aluminium crimp cap - Silicone white/PTFE blue

Slotted septa in HPLC as penetration aid for thick/blunt needles and for generating a valve effect in case of multiple injections.

Temperature range: -60 °C - 200 °C

Art.-Nr.:	Colour:	Septa:	Thickness:	Hole-Ø:	Hardness:
120-0587037	silver	Silicon white/PTFE blue <b>cuted</b>	1,0 mm	5,5 mm	55° shore A



Packing unit = 100 pcs. in PE-bag

**ND18 magnetic fine thread screw cap - Butyl(red) / PTFE(grey)**

Art.-Nr.	Thickness [mm]	Hole Ø [mm]	Hardness
120-0591393	1,6	8	55° shore A
Packing unit= 100 pieces in PE-bag			



**ND18 magnetic fine thread screw cap - „shaped disk“ Silicon (blue ) / PTFE (colourless)**

Art.-Nr.	Thickness [mm]	Hole Ø [mm]	Hardness
120-0786966	3	8	40° shore A
Packing unit= 100 pieces in PE-bag			



**ND18 magnetic fine thread screw cap - Silikon(blue) / PTFE(white)**

Art.-Nr.	Thickness [mm]	Hole Ø [mm]	Hardness:
120-0591379	1,3	8	45° shore A
Packing unit= 100 pieces in PE-bag			



**ND18 magnetic fine thread screw cap - Silikon(white) / PTFE(blue)**

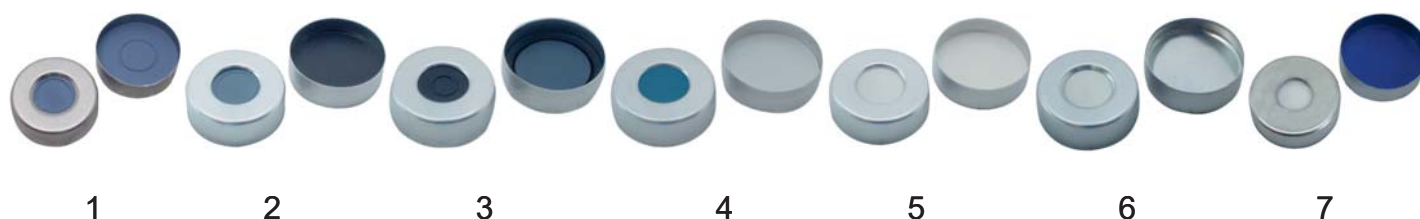
Art.-Nr.	Thickness [mm]	Hole Ø [mm]	Hardness:
120-0591362	1,5	8	55° shore A
Packing unit= 100 pieces in PE-bag			



## Alu-crimp caps with standard septa

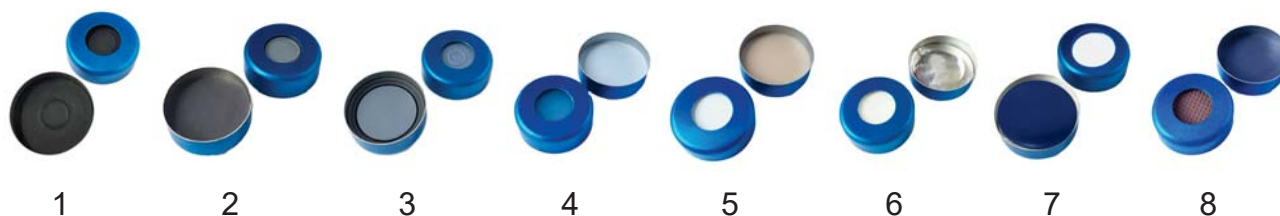
Art.-Nr.	Material	Farbe	Thickness[mm]	Hole Ø [mm]	
120-0587587	BK without PTFE	grey	3,1	10	1
120-0587365	„shaped disk“Butyl/ PTFE	grey/grey	3,1	10	2
120-0587358	„Pharma-Fix“	grey/grey	3,0	10	3
120-0587334	Silicone/PTFE	blue/white	3,1	10	4
120-0587761	Silicone/PTFE	white/beige	3,1	10	5
120-0587464	Silicone/Alu	white/silver	3,1	10	6
120-0587617*	Silicone/PTFE	white/blue	1,5	7	
Packing unit= 100 pieces in PE-bag					

\*magnetic



## Magnetic alu-crimp cap blue with standard septa

Art.-Nr.	Material	Farbe	Thickness[mm]	Hole Ø [mm]	
120-0404624	BK without PTFE	grey	3,1	10	1
120-0404631	„shaped disk“Butyl/ PTFE	grey/grey	3,1	10	2
120-0396769	Butyl/PTFE	grey/grey	3,0	10	3
120-0404792	Silicone/PTFE	blue/white	3,1	10	4
120-0404808	Silicone/PTFE	white/beige	3,1	10	5
120-0404822	Silicone/Alu	white/silver	3,1	10	6
120-0404839	Silicone/PTFE 0,5mm	white/blue	1,5	10	7
120-0404846	Punched disc BK / PTFE	redbrown/ grey	2,4	10	8
Packing unit= 100 pieces in PE-bag					



## Bottles / Vials

The following vials for chromatography, pharmacy and industry are produced in Germany and of the highest quality. They comply with the standard and could be used in all common systems. The entire range can be look up in our catalogue 150 Caps & Vials.



### ND8 Thread vials

SF = The bottle has a write-on patch



1

3

4

Article n°	KG/BG	Addition	Volume [mL]	Remaining [µL]	Height [mm]	Ø [mm]	
120-0588973	KG		1,5	< 120	32	12	1
120-0588980	KG	SF	1,5	< 120	32	12	3
120-0588966	BG	SF	0,2	< 10	32	12	4
Packing unit = 100 pcs. in PP-Box							

## ND9 Short thread vials - Agilent compatible



Due to its geometry suitable for all common autosamplers!

Article n°	KG/BG	Addition	Volume [mL]	Remaining [ $\mu$ L]	Height [mm]	$\varnothing$ [mm]	
120-0588973	KG		1,5	< 120	32	12	1
120-0459976	BG			< 120	32	12	
120-0588980	KG	SF	1,5	< 120	32	12	2
120-0588966	BG	SF	1,5	< 120	32	12	3
120-0588997	KG	SF + IS	0,2	< 1	32	12	4
120-0589000	BG	SF + IS	0,2	< 1	32	12	5
120-0589017	KG	Mikro	1,1	< 3	32	12	6

Packing unit = 100 pcs. in PP-Box

## ND11 Crimp vials

Standard vials  
for GC und HPLC



Information:

IS = Insert „Top Bonded“. It means that the Insert is firmly fused to the bottle at the bottle head.

SF = The bottle has a write-on patch

Micro = Best possible emptying

Article n°	KG/BG	Addition	Volume [mL]	Remaining [ $\mu$ L]	Height [mm]	$\varnothing$ [mm]	
120-0017565	KG		1,5	< 100	32	12	1
120-0645775	BG		1,5	< 100	32	12	2
120-0017602	KG	SF	1,5	< 100	32	12	3
120-0017619	BG	SF	1,5	< 100	32	12	4
120-0212311	KG	SF + IS	0,2	< 3	32	12	5
120-0589345	BG	SF + IS	0,2	< 3	32	12	
120-0589321	KG	Mikro	1,1	< 15	32	12	6
120-0885997	BG	Mikro	1,1	< 15	32	12	
120-0590556	KG	Total Mikro	0,9	< 1	32	12	7

Packing unit = 100 pcs. in PP-Box

## ND20 Headspace Crimpvials

Article n°	KG/BG	Bottom/Crimp	Volume [mL]	Remaining [µL]	Height [mm]	Ø [mm]	Bemerkung	
120-0588843	KG	Round/HS	5	800	38,2	22	PerkinElmer	1
120-0588850	KG	Round/HS	20	800	75,5	23	PerkinElmer, Tekmar	2
120-0588898	BG	Round/HS	20	800	75,5	23	PerkinElmer, Tekmar	3
120-0647809	KG	Round/HS/ write-on patch	20	800	75,5	23	PerkinElmer, Tekmar	
120-0588928	KG	flat/DIN	8	800	38	20	Varian	4
120-0588935	KG	flat/DIN	12	800	54,5	20	Varian	5
120-0588867	KG	Round/DIN	12	800	46	22,5	Carlo Erba, CTC, Fisons, Varian (CP)	6
120-0588874	BG	Round/DIN	12	800	46	22,5	Carlo Erba, CTC, Fisons, Varian (CP)	7
120-0588812	KG	flat/DIN	10	800	46	22,5	Carlo Erba, Dani, Fisons, Agilent	8
120-0645898	BG	flat/DIN	10	800	46	22,5	Carlo Erba, Dani, Fisons, Agilent	
120-0588829	KG	flat/DIN	20	800	75,5	22,5	Carlo Erba, Dani, Fisons, Agilent	9
120-0645942	BG	flat/DIN	20	800	75,5	22,5	Carlo Erba, Dani, Fisons, Agilent	
120-0592024	KG	Round/DIN	20	800	75,5	22,5	CTC PAL (Varian, Gerstel, Shimadzu, TriPlus HS)	10
120-0588881	BG	Round/DIN	20	800	75,5	22,5	CTC PAL (Varian, Gerstel, Shimadzu, TriPlus HS)	11

Packing unit = 100 pcs. in PP-Box



## ND18 Headspace Fine thread vials

Article n°	KG/BG	Volume [mL]	Remaining [µL]	Height [mm]	Ø [mm]	
120-0588751	KG	10	< 800	46	22,5	1
120-0588775	BG	10	< 800	46	22,5	2
120-0588768	KG	20	< 800	75,5	22,5	3
120-0588782	BG	20	< 800	75,5	22,5	4
Packing unit= 100 pcs. in PP-Box						



1 2 3 4

## ND24 EPA Bottles

Ideal for Agilent, Dionex, Shimadzu, Tekmar, Thermo Scientific, Varian EPA-bottles in clear or darkglas, made from Schott Fiolax glas.

Art.-No.:	KG/BG:	Volume:	Remain- ing:	Height:	Ø:
120-0044349	KG	23,3 ml	< 500 µl	57 mm	27,5 mm
120-0044370	BG	23,3 ml	< 500 µl	57 mm	27,5 mm
120-0588683	KG	31,1 ml	< 700 µl	72,5 mm	27,5 mm
120-0588720	BG	31,1 ml	< 700 µl	72,5 mm	27,5 mm
120-0044332	KG	42,9 ml	< 700 µl	95 mm	27,5 mm
120-0588737	BG	42,9 ml	< 700 µl	95 mm	27,5 mm
120-0588706	KG	64,4 ml	< 700 µl	140 mm	27,5 mm
120-0588744	BG	64,4 ml	< 700 µl	140 mm	27,5 mm



Packing unit= 100 pcs. in PP-Box

## Microlitervials

Special bottles for precious or small sample quantities. Samples in the microlitre range are difficult to handle with classic bottles. Too big is the rest, which remains in the classic 2ml bottle. Alternatively inserts can be used. However, they often do not stand cleanly in the bottle, have only limited sealing properties and have to be inserted manually. The microliter bottle assortment of LABC-Labortechnik is here an alternative.

- High-precision manufacturing
- in standard 12x32mm design
- suitable for all common GC & HPLC systems
- „Made in Germany“
- minimum residual volume
- self-supporting



## „Base Bonded“ Vials

Sample vials with integrated micro insert „Base Bonded“.

Our „Base Bonded“ bottles are suitable for all common autosamplers and are available as an alternative to ND8 screw thread, ND9 short thread or as a snap ring / crimp neck bottle ND11 in clear or amber glass.

Article n°	KG/BG	Addition	Volume [mL]	Remaining [µL]	Height [mm]	Ø [mm]
120-0589031	KG	Short Thread ND9	0,3	< 3	32	12
120-0884914	BG	Short Thread ND9	0,3	< 3	32	12
120-0589383	KG	Crimp ND11	0,3	< 3	32	12
120-0881753	BG	Crimp ND11	0,3	< 3	32	12
120-0590532	KG	Snapcap ND11	0,3	< 3	32	12
120-0889421	BG	Snapcap ND11	0,3	< 3	32	12

Packing unit = 100 pcs. in PP-Box

## iK11µ-Vial



Thread	KG/BG	Article n°
ND 8	KG	
ND 8	BG	
ND 9	KG	
ND 9	BG	120-0934763
ND 11 Crimp	KG	
ND 11 Crimp	BG	
ND 11 Snap	KG	
ND 11 Snap	BG	



### V $\mu$ -Vial



Thread	KG/BG	Article n°
ND 8	KG	120-0455916
ND 8	BG	120-0455886
ND 9	KG	120-0455855
ND 9	BG	120-0455787
ND 11 Crimp	KG	120-0455312
ND 11 Crimp	BG	120-0455244
ND 11 Snap	KG	120-0455473
ND 11 Snap	BG	120-0455404



Capacity: 1,2 ml  
 Optimised capacity: 150  $\mu$ l  
 Minimum capacity: 15  $\mu$ l

### iV2 $\mu$ -Vial

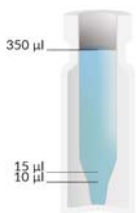


Thread	KG/BG	Article n°
ND 8	KG	
ND 8	BG	
ND 9	KG	120-0455831
ND 9	BG	120-0455763
ND 11 Crimp	KG	120-0455299
ND 11 Crimp	BG	120-0408066
ND 11 Snap	KG	120-0455459
ND 11 Snap	BG	120-0455381



Capacity: 250  $\mu$ l  
 Optimised capacity: 25  $\mu$ l  
 Minimum capacity: 8  $\mu$ l

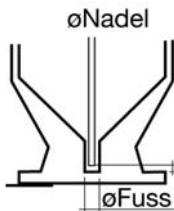
### i3 $\mu$ -Vial



Thread	KG/BG	Article n°
ND 8	KG	
ND 8	BG	
ND 9	KG	120-0455824
ND 9	BG	120-0455756
ND 11 Crimp	KG	120-0455282
ND 11 Crimp	BG	120-0455213
ND 11 Snap	KG	120-0455442
ND 11 Snap	BG	120-0455374

Capacity: 350  $\mu$ l  
 Optimised capacity: 15  $\mu$ l  
 Minimum capacity: 10  $\mu$ l

## VMax-Vial - for optimised microsampling



Big vase vials, which stands without support. Ideally for automatic sample preparation. VMax-Vial has a cylindrical „foot“. In our opinion it is superior than a conical „foot“, especially in an autosampler.

- Microvial stands without support
- with optimised residual emptying
- ideal for automated sample preparation
- Remaining volume approx.  $\leq 7 \mu\text{l}$

Contribution of the optimised rest emptying in existing bottles of 1000 pieces is possible. The following vials are available from stock:

### ND13 Screw-VMax-Vial

Article n°	KG/BG	Volume	Height	Ø
120-0461535	KG	3,5 ml	45 mm	14 mm
120-0461504	BG	3,5 ml	45 mm	14 mm
Packing unit = 100 pcs. PP-Box				

### ND15 Screw-VMax-Vial

Article n°	KG/BG	Volume [mL]	Height	Ø
120-0461573	KG	9,5 ml	65 mm	19 mm
120-0461566	BG	9,5 ml	65 mm	19 mm
Packing unit = 100 pcs. PP-Box				

## ND24 Screw-VMax-Vial

Article n°	KG/BG	Volume	Height	Ø
120-0461672	KG	19 ml	57 mm	27 mm
120-0461658	BG	19 ml	57 mm	27 mm
120-0461719	KG	39 ml	95 mm	27 mm
120-0461696	BG	39 ml	95 mm	27 mm
120-0461757	KG	59 ml	140 mm	27 mm
120-0461733	BG	59 ml	140 mm	27 mm
Packing unit = 100 pcs. PP-Box				

## Headspace-Screw-VMax-Vial

Article n°	KG/BG	Volume	Height	Ø
120-0647359	KG	9,5 ml	43 mm	23 mm
120-0647335	BG	9,5 ml	43 mm	23 mm
120-0647397	KG	19 ml	73 mm	23 mm
120-0647373	BG	19 ml	73 mm	23 mm
Packing unit = 100 pcs. PP-Box				



## ND20 Headspace-VMax-Vial with Crimp-Neck

Article n°	KG/BG	Volume	Height	Ø
120-0460774	KG	9,5 ml	43 mm	23 mm
120-0460767	BG	9,5 ml	43 mm	23 mm
120-0642651	KG	19 ml	75 mm	23 mm
120-0645980	BG	19 ml	75 mm	23 mm
Packing unit = 100 pcs. PP-Box				



## Specialvials

Special bottles for special applications. Please find below a small selection of the bottles we produce and/or distribute for special applications.

### Weight constant single-threaded bottle, < 4.8 g

„Light“ 4 cc monobloc screw-in vial,  
Weight: < 4.8 g,  
Wall thickness: 0.8 mm,  
especially suitable for use on analytical balances,



Art.-Nr.:	KG/BG:	Volume:	High:	Ø:
120-0646079	KG	4 ml	45 mm	14 mm
120-0646062	BG	4 ml	45 mm	14 mm

Packing unit= 100 pcs. in a box

### Threaded bottles with round bottom

Ideal for Waters®. Screw-on vial with round base with a 13-425 thread.

Art.-Nr.:	KG/BG:	Volume:	High:	Ø:
120-0646017	KG	3,5 ml	45 mm	14 mm
120-0646031	KG	8,5 ml	75 mm	16 mm



Packing unit= 100 pcs. in a box

### Specified flat bottom glass 48x22mm

Specified flat bottom glass for NIR spectrometers (NIR=near infrared) for the measurement of liquid, granular or powdery samples. The flat bottom glasses of the 1st hydrolytic class with a special mirror bottom are 100% optoelectronically controlled!

Art.-Nr.:	KG/BG:	Volume:	High:	Ø:
120-0788168	KG	15 ml	48 mm	22 mm



## Glass disposable round cuvette

Economical glass disposable cuvette (LYY 621) suitable for determining the colour number.

Art.-Nr.:	KG/BG:	Volume:	High:	Ø:
120-0394765	KG	8 ml	84 mm	13 mm

## Storageevials

Bottles and closures for the storage of various samples.

## Snap cap bottles

Inexpensive storage containers with a snap cap.  
Quick and easy to open and close.  
The cap does not require a sealing disc.



Art.-Nr.:	KG/BG:	Volume:	Rest:	High:	Ø:
120-0590150	KG	5 ml	< 300 µl	40 mm	20 mm
120-0590167	KG	10 ml	< 500 µl	50 mm	22 mm
120-0647762	KG	15 ml	< 600 µl	48 mm	26 mm
120-0590181	KG	25 ml	< 600 µl	65 mm	26 mm

Packing unit= 100 pcs. in a box

## Snap cap

The cap does not require a sealing washer.  
closed snap-on lid



Art.-Nr.:	Colour:	High:	Ø:
120-0589390	colourless	5,2 mm	20 mm

Packing unit= 100 pcs. in a box

## Sample bottles for raw materials with DIN thread and a screw cap of PP-orange with inserted seal of PE/PTFE

Conforms to EC 1935/2004 / EU 10/2011, with the PTFE lamination facing the contents of the bottle. Universally suitable for: Pigments, solvent-containing printing ink pastes or liquids (paint, resins, etc.). The wide opening enables even mushy or viscous substances to be removed easily, e.g. with a spoon. The narrow opening reduces the sealing surface and is ideal for liquid samples. The bottle and screw cap can be easily cleaned - even in the dishwasher. The temperature resistance of the screw cap made of PP with inserted PTFE-laminated PE foam seal is included: -20°C up to +70°C.

Available volumes and sizes wide neck glasses in clear glass:

Art-Nr.	Volume	VE	Bottle-Ø	Bottle High	Cover thread*
120-0278003	30 ml	120	36 mm	72 mm	DIN 32
120-0212755	50 ml	85	44 mm	79 mm	DIN 32
120-0212779	100 ml	63	50 mm	97 mm	DIN 40
120-0212793	250 ml	30	70 mm	118 mm	DIN 55
120-0591645	500 ml	20	83 mm	158 mm	DIN 55
120-0591652	1000 ml	18	103 mm	185 mm	DIN 68



Available volumes and sizes wide neck glasses in amber glass:

Art-Nr.	Volume	VE	Bottle-Ø	Bottle High	Cover thread*
120-0591669	50 ml	85	44 mm	79 mm	DIN 32
120-0591676	100 ml	56	50 mm	97 mm	DIN 40
120-0591683	250 ml	30	70 mm	118 mm	DIN 55
120-0749855	500 ml	20	83 mm	158 mm	DIN 55



Available volumes and sizes narrow neck glasses in clear glass:

Art-Nr.	Volume	VE	Bottle-Ø	Bottle High	Cover thread*
120-0148559	100 ml	72	45 mm	118 mm	DIN 22
120-0237987	250 ml	42	61 mm	151 mm	DIN 22
120-0738781	500 ml	35	76 mm	189 mm	DIN 25



Available volumes and sizes narrow neck glasses in amber glass:

Art-Nr.	Volume	VE	Bottle-Ø	Bottle High	Cover thread*
120-0738804	100 ml	72	45 mm	118 mm	DIN 22
120-0237987	250 ml	42	61 mm	151 mm	DIN 22
120-0738781	500 ml	35	76 mm	189 mm	DIN 25



\* Thread according to DIN 168  
Please order cap separately!

## Standard screw cap with LDPE insert

Conventional seal made of LDPE for aqueous, pasty or powdery samples.



Art-Nr.	Cover thread	Screw cap material	inserted seal
120-0937634	DIN 22	PP / black	LDPE Insert
120-0937641	DIN 25	PP / black	LDPE Insert
120-0096058	DIN 32	PP / black	LDPE Insert
120-0096065	DIN 40	PP / black	LDPE Insert
120-0096089	DIN 55	PP / black	LDPE Insert
120-0096096	DIN 68	PP / black	LDPE Insert

## Standard screw cap with PTFE insert

The PTFE-coated, closed-cell polyethylene foam seal is designed for more demanding samples. Due to the high elasticity of the PE foam and the pronounced resilience, the PE foam seal laminated with a migration-compliant PTFE (Teflon®) is excellently suited to compensate for tolerances in the interplay between closure and container mouth.



With the PTFE lamination - to the product side - this seal achieves a very high chemical resistance and its excellent sealing properties make it ideal for sampling, storage and transport of raw material samples for migration and MOSH/MOAH investigations. Even solvent-based coatings can be safely transported and stored with the seal.

Art-Nr.	Cover thread	Screw cap material	inserted seal
120-0310369	DIN 22	PP / orange	PTFE Insert
120-0239707	DIN 25	PP / orange	PTFE Insert
120-0070898	DIN 32	PP / orange	PTFE Insert
120-0172387	DIN 40	PP / orange	PTFE Insert
120-0070911	DIN 55	PP / orange	PTFE Insert
120-0172059	DIN 68	PP / orange	PTFE Insert

## S<sup>3</sup>vial – Sampling, Storing, Shipping



Intelligent handling for small quantities (0.3 - 10ml) of liquid or solid chemicals:  
In a handy, larger glass tube there is a firmly integrated glass vial with thread.



S3vial = Sampling:  
Dispatching and taking samples

S3vial = Storing:  
Storage of chemicals

S3vial = Shipping:  
Shipping e.g. as inner packaging  
for the shipment of exempted  
quantities of dangerous goods of  
certain classes according to  
3.5 ADR/RID (Excepted Quantities).

available variants S3vial:

Article n°	KG/BG	Volume [mL]	Height [mm]	Ø [mm]	Hole	Thread
120-0933582	KG	1.5ml	40	14	8mm	13-425
120-0933599	BG	1.5ml	40	14	8mm	13-425
120-0933605	KG	0.3ml	58	19	9,5mm	15-425
120-0933612	BG	0.3ml	58	19	9,5mm	15-425
120-0933629	KG	2.5ml	58	19	9,5mm	15-425
120-0933636	BG	2.5ml	58	19	9,5mm	15-425
120-0933643	KG	1ml	85	27	17mm	24-400
120-0933650	BG	1ml	85	27	17mm	24-400
120-0933667	KG	10ml	85	27	17mm	24-400
120-0933674	BG	10ml	85	27	17mm	24-400
120-0933681	KG	0.05ml	85	27	17mm	24-400
120-0933698	BG	0.05ml	85	27	17mm	24-400
120-0933704	KG	0.5ml	60	23	10mm	HS6-19
120-0933711	BG	0.5ml	60	23	10mm	HS6-19
120-0933728	KG	5ml	60	23	10mm	HS6-19
120-0933735	BG	5ml	60	23	10mm	HS6-19
VPE = 100 Stk						

You can find the corresponding caps on [www.LABC.de](http://www.LABC.de)





## LABC-High density storage vial „iTri“



LABC storage vial „iTri“ for very volatile samples and standards.

The high-density „iTri“ vial is perfect for storage and transport of volatile samples and small sample volumes. The special construction of the inside funnel above makes sure that even extremely volatile samples do not re-escape or escape only very slowly. Furthermore the vial has a thick thread and a magnetic cap. In an automatic system the vial can be used to store volatile samples or e.g. for sample preparation.

- high density thanks to melted and tapered inner funnel
- Optimised residue emptying thanks to the so-called Vmax-bottom
- thanks to the GHS thread also suitable for sending samples
- uniform bottle size for different sample volumes
- closed, magnetic and cap with hole available

Article n°	Volume	Dimension	OEM Number
120-0940139	1 ml	23 x 73 mm	GHS6-iTri01-H/VM $\mu$
120-0937702	5 ml	23 x 73 mm	GHS6-iTri05-H/VM $\mu$
120-0937696	8 ml	23 x 73 mm	GHS6-iTri10-H/VM $\mu$
VPE = 10 Stk			



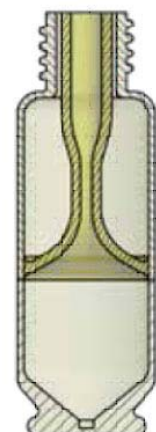
Article n°	Volume	Dimension	OEM Number
120-0934046	1 ml	23 x 73 mm	GHS6-iTri01-D/VM $\mu$
120-0934053	5 ml	23 x 73 mm	GHS6-iTri05-D/VM $\mu$
120-0934060	8 ml	23 x 73 mm	GHS6-iTri10-D/VM $\mu$
VPE = 10 Stk			



The tapered inner funnel, which is melted into the bottle, offers a big surface with a very small opening. This provides in connection with the GHS thread an extreme tightness. Even when piercing the septum several times with a needle or when using unsealed bottles, volatile samples could be retained in the bottle.

The special design ensures a safe storage of your sample or standard. The sample bottle „iTri“ is available as 23x73mm bottle in three different volumes. Caps for the GHS thread are available in 6 colours with different septa and with or without opening.

„iTri“ is manufactured in Germany by GTG Glastechnik Gräfenroda.



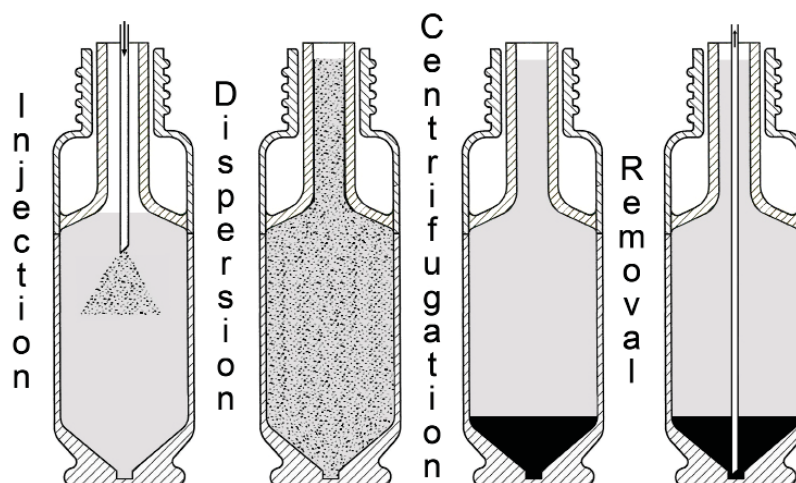
## bilimex® - Dispersive Liquid-Liquid-Microextraction

With the DLLME the desired analyte is extracted from aqueous solutions with the help of a small amount of organic solvent and simultaneously concentrated. The process is usually carried out using centrifuge tubes with the aid of a solvent heavier than water. DieLABC.Labortechnik has developed products for the DLL-ME, with the help of which the concentration of

1. using solvents which are both heavier and lighter than water
2. which are suitable for automated sample preparation using standard autosamplers

The products are combined in the bilimex® range.

- Injection of solvents
- Disperse e.g. by shaking
- Centrifuging to produce phase separation
- Removal by means of a microliter syringe



Depending on the sample matrix and the analytes to be extracted, the individual steps differ slightly from each other. You will find a detailed description of how to carry out the experiment in the bilimex® flyer at [www.LABC.de](http://www.LABC.de).

## **Kontakt:**

Für Bestellungen, Informationen und/oder Informationen, wenden Sie sich bitte an:

### **LABC-Labortechnik GmbH**

Reisertstraße 5  
D-53773 Hennef

Tel.: +49 2242 96946-0  
Fax: +49 2242 96946-20  
E-Mail: [info.gmbh@labc.de](mailto:info.gmbh@labc.de)  
E-Mail: [info.gmbh@labc.de](mailto:info.gmbh@labc.de)

### **Vertreten durch:**

Geschäftsführender Gesellschafter:  
Florian Zillger

Represented by  
Florian Zillger  
Managing Partner

Viele weitere **Produkte** und **Informationen** auch unter:

Further information and products:

[www.LABC.de](http://www.LABC.de)

[www.LABC.de](http://www.LABC.de)