

11. Headspace-Vials ND20 + ND18

11.1 General overview Headspace Vials ND18 + ND20

						
Article	HSB200238	HSB200239 HSB200352	HSB200207	HSB180931	HSB200354	HSB200355
Descr.	5ml Headspace-Vial, 38.2 x 22mm, clear glass, 1st hydrol. class,	20ml Headspace-Vial, 75.5 x 23mm, clear glass, 1st hydrol. class, (Amber Glass)	20ml Headspace-Vial, 75.5 x 23mm, clear glass, 1st hydrol. class, label + filling lines	20ml Headspace-Vial 75.5 x 23mm, clear glass, 1st hydrol. class, with screw thread ND18	5ml Crimp Neck Vial, 38 x 20mm, clear glass, 1st hydrol. class,	10ml Crimp Neck Vial, 54.5 x 20mm, clear glass, 1st hydrol. class
Features	HS-Crimp Neck, rounded bottom	HS-Crimp Neck, rounded bottom	HS-Crimp Neck, rounded bottom	Screw Neck ND18, rounded bottom	DIN Crimp Neck, flat bottom	DIN Crimp Neck, flat bottom
Filling Capacity	9,4ml	22ml	22ml	21,2ml	8ml	12,2ml
Residual volume	800µl	800µl	800µl	800µl	800µl	800µl
	PerkinElmer	PerkinElmer, Tekmar	PerkinElmer, Tekmar	PerkinElmer	Varian	Varian
100 pcs.per PP-Box						

						
Article	HSB200302 HSB200350	HSB200235	HSB200236	HSB200237 HSB200351	HSB200353 HSB200732	HSB200996
Descr.	10ml Headspace-Vial, 46 x 22.5mm, clear glass, 1st hydrol. class (Amber Glass)	10ml Headspace-Vial, 46 x 22.5mm, clear glass, 1st hydrol. class	20ml Headspace-Vial, 75.5 x 22.5mm, clear glass, 1st hydrol. class	20ml Headspace-Vial, 75.5 x 22.5mm, clear glass, 1st hydrol. class (Amber Glass)	20ml SPME Vial, 75.5 x 22.5mm, clear glass, 1st hydrol. class (Amber Glass)	5ml Headspace-Vial, 38,2 x 21,7mm, clear glass, 1st hydrol. class
Features	DIN Crimp Neck, rounded bottom	DIN Crimp Neck, flat bottom	DIN Crimp Neck, flat bottom	DIN Crimp Neck, rounded bottom	Special Crimp Neck, rounded bottom	HS-Rollrand, flat bottom
Filling Capacity	12,3ml	11,7ml	21,2ml	20,9ml	21,2ml	21,2ml
Residual volume	800µl	800µl	800µl	800µl	800µl	800µl
	Carlo Erba, CTC, Fisons, Varian (CP)	Carlo Erba, Dani, Fisons, Agilent	Carlo Erba, Dani, Fisons, Agilent	CTC PAL (Varian, Gerstel, Atas, Shimadzu, TriPlus HS)	SPME Flasche for CTC PAL	Metrohm
100 pcs.per PP-Box						

Screw Neck ND18

For the instruments on which this vial can be used, please refer to the compatibility chart below, or the compatibility chart on pages 62 - 73.

11.2 Screw Neck Vial ND18



Article	HSB180931
Descr.	20ml Headspace-Vial 75.5 x 23mm, clear glass, 1st hydrol. class
Filling Capacity	21,2ml
Residual volume	800µl
100 pcs.per PP-Box	

Compatibility-Overview		
PerkinElmer	HS40/ HS100/ HS101TurboMatri x HS16/ HS40/ HS40XL/ S40Trap/HS110/ HS110Trap	X
Spark	Alias	X
Teledyne Tekmar	7000/ 7000HT/ 7050/ HT3	X
Thermo Scientific	Trace 1300 Series	X

11.2.1 PP Screw Seals ND18

- For headspace analysis or as sample storage vials
- With our variety of septa we will find a customized solution for you



Art. No.	SVB181076	SVB181177	SVB180898	SVB181036	SVB181296
	Headspace			Storage	
Cap	PP SC, black, 12mm hole, GL 18			PP SC, black, closed top, GL 18	
Septa	Butyl red/ PTFE grey	Silicone white/PTFE blue	Silicone white/Aluminum foil silver	Butyl red/ PTFE grey	Butyl dark grey
Hardness	55° shore A	55° shore A	50° shore A	55° shore A	48° shore A
Thickness	1,6mm	1,5mm	1,3mm	1,6mm	3mm
100 pcs. per PE-Bag					

11.2.2 Septa 16mm and Screw Seals ND18



Art. No.	SEB160894	SEB160892	SEB161003	SEB160851	SEB161295	SKB180888	SKB180889
Septa / Cap	Natural Ruber red- range/TEF transparent	Viton, black	Butyl red/PTFE grey	Silicone white/ Aluminum foil silver	Butyl dark grey	PP Screw Cap ND18, black, With hole	PP Screw Cap ND18, black, closed top
Hardness	60° shore A	70° shore A	55° shore A	50° shore A	48° shore A		
Thickness	1,3mm	1,0mm	1,6mm	1,3mm	3mm		
1.000 pcs. per PE-Bag							

- Further septa available in other materials and thicknesses
- PP Screw Cap ND18 also available in white!

11.3 Aluminum Crimp Seals ND20

- Wide range of vials and seals required to cope with the large number of devices available on the market
- Besides the vial length and the tube diameter, the neck length also plays a major role when selecting a suitable ND20 headspace vial, since these are designed depending on the instrument
- For the selection of a suitable closure, the type of cap is very important in addition to the special requirements for the sealing disc (purity, hardness, thickness, etc.). The transport mechanism from the sampler to the analyser must be considered here in the first instance and thus ensures an initial pre-selection.

Overview of available cap types ND20

- Different characteristics compared
- Various colour coatings for easy sample differentiation
- Tamper-evident perforated caps to prevent manipulation and/or contamination of the septum during transport of the samples

Aluminium crimped cap	Headspace-cap	Centre tear-off cap	Flip-off Cap	Complete tear-off cap	Magnetic crimp cap	Magnetic crimp cap	Magnetic Bim-Metal Cap
							
							
							
							
							
							
							
10mm hole	8mm hole	8mm hole	8mm hole		6mm hole	8mm hole	8mm hole
	Pressure release cap; comparable with patented PerkinElmer Seal	Tamper evident crimp cap: Centre-Tear-Off part		Tamper evident crimp cap	CE HS500/ HS800/ CTC500/ Fisons HS500/ HS800	CTC Combi PAL	CTC Combi PAL

Basically each of the above mentioned Cap can be combined with a septa of your choice! The cap selection in the following chapter only represents our standard range.



Septa ND20

						
Art. No.	SEB200646	SEB200156	SEB200143	SEB200087	SEB200608	SEB200524
Septa	moulded septa Butyl, grey	moulded septa Butyl/PTFE, grey	Pharma-Fix- moulded septa, (Butyl/PTFE)	Silicone blue transp./PTFE white	UltraClean Silicone stopper, transparent	Silicone white/Aluminum foil silver
Hardness	55° shore A	50° shore A	50° shore A	45° shore A	37° shore A	50° shore A
Thickness	3,0mm	3,0mm	3,0mm	3,0mm		3,0mm
						
Art. No.	SEB200093	SEB200700	SEB200639	SEB200906	SEB200724	SEB200917
Septa	Viton 1A, black	Silicone white/ PTFE blue	Silicone white/ PTFE beige	Silicone white/ PTFE beige (HT Quality)	Silicone natur /PTFE beige (improved HT Quality)	HTS Septa, Silicone dark- red/PTFE
Hardness	70° shore A	55° shore A	45° shore A	45° shore A	45° shore A	45° shore A
Thickness	1,0mm	1,5mm	3,0mm	3,2mm	3,2mm	3,0mm
1.000 pcs. per PE-Bag						

11.3.1 Butyl Seals

- Temperature resistant from -40° C to 120° C
- Due to missing PTFE lamination only suitable for uncritical analyses
- Inexpensive combination closure
- The moulded septa is purer and denser compared to a conventional punching septa

						
Art. No.	BVB200648	BVB200647	BVB200810	BVB200811	BVB200852	BVB200813
Cap	Aluminum Crimp Cap, clear lacquered, 10mm hole	Headspace-Cap, clear lacquered	Centre tear-off cap, clear lacquered	Completely tear-off cap, clear lacquered	Magnetic Crimp Cap, silver, 6mm hole	Magnetic Crimp Cap, silver, 8mm hole
Septa	moulded septa Butyl, grey, 55° shore A, 3,0mm					
100 pcs. per PE-Bag						

11.3.2 Butyl/PTFE Seals

- Temperature resistant from -40° C to 120° C
- Complete PTFE lamination extends the range of applications to include more critical analysis

							
Art. No.	BVB200157	BVB200248	BVB200814	BVB200572	BVB200392	BVB200654	BVB200223
Cap	Aluminum Crimp Cap, clear lacquered, 10mm hole	Headspace-Cap, clear lacquered	Centre-Tear-Off-Cap, clear lacquered	Complete-Tear-Off-Cap, clear lacquered	Magnetic Crimp Cap, silver, 6mm hole	Magnetic Crimp Cap, silver, 8mm hole	Magnetic Bimetal-Cap, blue, 8mm hole
Septa			moulded septa Butyl/PTFE grey, 50° shore A, 3,0mm				
100 pcs. per PE-Bag							



11.3.3 Pharma-Fix Seals (Butyl/PTFE)

- **Special Septa:** Special, moulded Butyl/PTFE liner that is only laminated with PTFE in the contact area towards the sample.
On the glass rims the elastic Butyl achieves a very tight seal.
- Temperature resistant from -40°C up to 120°C.



Art. No.	BVB200145	BVB200249	BVB200573	BVB200144	BVB200300	BVB200686	BVB200222
Cap	Aluminum Crimp Cap clear lacquered, 10mm hole	Headspace-Cap, clear lacquered	Centre-Tear-Off-Cap, clear lacquered	Complete-Tear-Off-Cap, clear lacquered	Magnetic Crimp Cap, silver, 6mm hole	Magnetic Crimp Cap, silver, 8mm hole	Magnetic Bimetal Cap, blue, 8mm hole
Septa	Pharma-Fix-Septa, Butyl/PTFE, 50° shore A, 3,0mm						
100 pcs. per PE-Bag							

11.3.4 Silicone blue transparent/PTFE white Seals

- Temperature resistant from -60°C to 200°C
- Soft septa for easy penetration
- Purest synthetic rubber, therefore used for critical analyses



Art. No.	BVB200133	BVB200244	BVB200574	BVB200113	BVB200395	BVB200712	BVB200215
Cap	Aluminum Crimp Cap, clear lacquered, 10mm hole	Headspace- Cap, clear lacquered	Centre-Tear- Off-Cap, clear lacquered	Complete- Tear-Off-Cap, clear lacquered	Magnetic Crimp Cap, silver, 6mm hole	Magnetic Crimp Cap, silver, 8mm hole	Magnetic Bimetal- Cap, blue, 8mm hole
Septa	Silicone blue transparent/PTFE white, 45° shore A, 3,0mm						
100 pcs. per PE-Bag							

11.3.5 Silicone white/PTFE beige Seals (HT-Quality)

- Temperature resistant from -60°C to 200°C
- Soft septa for easy penetration
- Purest synthetic rubber, therefore used for critical analyses
- Silicone natural/PTFE beige corresponds the improved Agilent HT quality



Art. No.	BVB200907	BVB200908	BVB200909	BVB200910	BVB200815	BVB200719	BVB200838
Cap	Aluminum Crimp Cap clear lacquered, 10mm hole	Headspace- Cap, clear lacquered	Magnetic Crimp Cap, silver, 8mm hole	Magnetic Bimetal- Cap, blue, 8mm hole	Aluminum Crimp Cap clear lacquered, 10mm hole	Headspace- Cap, clear lacquered	Magnetic Crimp Cap, silver, 8mm hole
Septa	Silicone white/PTFE white, 45° shore A, 3,2mm (HT-Quality)				Silicone natur/PTFE beige, 45° shore A, 3,2mm improved HT quality		
100 pcs. per PE-Bag							



11.3.6 Silicone white/PTFE beige

- Temperature resistant from -60°C to 200° C
- Silicone septa completely laminated with PTFE
- Often used on instruments of Shimadzu



Art. No.	BVB200640	BVB200641	BVB200926	BVB200927	BVB200928	BVB200645	BVB200642
Cap	Aluminum Crimp Cap, clear lacquered, 10mm hole	Headspace- Cap, clear lacquered	Centre-Tear- Off-Cap, clear lacquered	Complete- Tear-Off-Cap, clear lacquered	Magnetic Crimp Cap, silver, 6mm hole	Magnetic Crimp Cap, silver, 8mm hole	Magnetic Bimetal Cap, blue, 8mm hole
Septa	Silicone white/PTFE beige, 45° shore A, 3,0mm						
100 pcs. per PE-Bag							

11.3.7 Silicone White/Aluminum foil, silver

- Completely with aluminium foil laminated silicone sept
- Often used on instruments of PERKINELMER
- The same chemical and physical properties like PTFE laminated septa
- Temperature resistant from -60°C to 220° C



Art. No.	BVB200525	BVB200527	BVB200830	BVB200526	BVB200731	BVB200839	BVB200823
Cap	Aluminum Crimp Cap, clear lacquered, 10mm hole	Headspace- Cap, clear lacquered	Centre-Tear- Off-Cap, clear lacquered	Complete- Tear-Off-Cap, clear lacquered	Magnetic Crimp Cap, silver, 6mm hole	Magnetic Crimp Cap, silver, 8mm hole	Magnetic Bimetal Cap, blue, 8mm hole
Septa	Silicone white/Aluminum foil, silver, 50° shore A, 3,0mm						
100 pcs. per PE-Bag							

11.3.8 HTS Silicone dark-red/PTFE Seals

- New closure system with our HTS-Septa dark red/PTFE for high temperature areas in headspace analysis
- **Temperature resistant from -60°C to 300° C**



Art. No.	BVB200923	SEB200917
Cap	Magnetic Crimp Cap, silver,6mm hole	-
Septa	High temperature septa (HTS), silicone dark-red/PTFE, 45° shore A, 3.0mm	
100 pcs. per PE-Bag		



11.3.9 Magnetic Seals for SPME Vials HS 20 0353 and HS 20 0732

- To facilitate penetration in the sensitive SPME phase, it is necessary to use thinner septa than the 3.0mm thick septa normally used in headspace.
- In addition, our Article BV 20 0699 is based on a thinned teflon barrier, as the PTFE lamination is the most difficult part of the septa to penetrate.
- Viton - see article BV 20 0816 - with its outstanding chemical and physical properties does not require any barrier, as it has a very good resistance to acids, oils and petrol. Temperature resistant from -40°C to 240°C, for a short time Viton even withstands temperature loads of 300°C!
- The ultra-thin full-surface aluminium foil of our article BV 20 0930 offers ideal protection, even against highly aggressive filling materials; combined with the only 1.3mm thin, high-purity white silicone, the Septa is very gentle to the needle



Art. No.	BVB200699	BVB200816	BVB200930
Cap	Magnetic Crimp Cap, silver, 8mm hole		
Septa	Silicone white/PTFE blue	Viton 1A, black	Silicone white/Aluminum foil silver
Hardness	55° shore A	70° shore A	50° shore A
Thickness	1,5mm	1,0mm	1,3mm
100 pcs. per PE-Bag			



11.4 Transport or intermediate seal for HS-edge/ rolled edge ND20 (Wash vial cap ND20)

- 20mm seal often used for washing vials for instruments
- Inexpensive and practical intermediate seal when taking samples outside on site
- Cap height of 8.4mm suitable for HS bottles with bevelled HS crimp neck.
- Cap height of 9.1mm for headspace vials with DIN crimp neck.



Art. No.	SNB200903	SNB200933	SNB200934	SNB200935	SNB200936	SNB200937	SNB200938
Cap		20mm PE-Cap, transparent, cap height 8,4mm, 4,3mm hole			20mm PE-Cap, transparent, cap height 9,1mm, 4,3mm hole		PE-Cap, transparent, cap height 9,1mm, 8mm hole
Septa	Natural Rubber red-orange/TEF transparent	Butyl cream/PTFE grey	Silicone blue/transparent/PTFE white	Natural Rubber red-range/TEF transparent	Butyl red/PTFE grey	Silicone blue/transparent/PTFE white	Silicone blue/transparent/PTFE white, cross-slit
Hardness	60° shore A	55° shore A	45° shore A	60° shore A	55° shore A	45° shore A	45° shore A
Thickness	1,3mm	1,3mm	1,3mm	1,3mm	1,3mm	1,3mm	1,3mm
100 pcs. per PE-Bag							

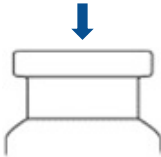
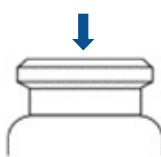
11.4.1 Septa 19,5mm for Washer Bottle Caps



Art. No.	SEB190902	SEB190939	SEB190940	SEB100941
Septa	Natural Rubber red-orange/ TEF transparent	Butyl cream/ PTFE grey	Silicone blue transparent/PTFE white	Silicone blue/ transparent/PTFE white, cross-slit
Hardness	60° shore A	55° shore A	45° shore A	45° shore A
Thickness	1,3mm	1,3mm	1,3mm	1,3mm
100 pcs. per PE-Bag				

11.4.2 PE Seals for Washer Bottles



Art. Nr	SD200885	SD200886	SD200887
Cap	20mm PE Cap, transparent, 4,3mm hole, cap height 8,4mm	20mm PE Cap, transparent, 4,3mm hole, cap height 9,1mm	20mm PE Cap, transparent, 8mm hole, cap height 8,4mm
E.g..	for bevelled HS-Crimp Neck	for HS-Vials with DIN CrImp	for bevelled HS-Crimp Neck
  			
100 pcs. per PE-Bag			