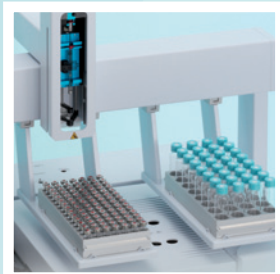


# La-Pha-Pack®

## PAL SYSTEM CONSUMABLES

PAL GC/GC-MS Sample Injector

PAL LC/LC-MS Sample Injector



## Identify the appropriate La-Pha-Pack product for your PAL autosampler.

The brochure is divided in four fields of applications:

<b>HPLC</b>	With instrument(s):	LC  IFC  HTC  HTS 
<b>GC</b>	With instrument(s):	GC  COMBI 
<b>HS</b>	With instrument(s):	COMBI 
<b>HTS</b>	With instrument(s):	HTC  HTS 

Consumables listed in the individual chapters have been approved by CTC Analytics to be suitable for usage on the indicated type of the PAL autosampler. However, cost-free samples can be requested any time for testing.

All products of this brochure are standard products and thus normally deliverable ex stock. Our company policy prohibits supply to end-users. However, we will be glad to help any user in possession of an instrument of CTC Analytics with technical advice and samples. Upon request we can provide you with addresses of dealers that distribute our products.

The brochure includes only the most common products for PAL autosampler. You will find further seals and vials in our general catalogue, which you can request by visiting our website at [www.la-pha-pack.com](http://www.la-pha-pack.com).

The brochure contains general consumables, like Vial Racks, Crimping Tools or Syringe Filters, that are required in connection with the analysis of samples, however, are independent from the instrument. Detailed information on these products can also be taken from our general catalogue.



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# 1. Short Thread ND9 (wide opening)



LC PAL

HTC PAL

HTS PAL



11 09 0500	11 09 0519	11 09 0520	PP 11 19 1205 11 19 1516	06 09 0357	06 09 0669	06 09 0865	06 09 0866
1.5ml Short Thread Vial, 32 x 11.6mm, clear glass, 1 <sup>st</sup> hydrol. class, wide opening	1.5ml Short Thread Vial, 32 x 11.6mm, clear glass, 1 <sup>st</sup> hydrol. class, wide opening, label + filling lines	1.5ml Short Thread Vial, 32 x 11.6mm, amber glass, 1 <sup>st</sup> hydrol. class, wide opening, label + filling lines	1.5ml PP Short Thread Vial, 32 x 11.6mm, transparent/amber with filling lines, slightly concave shaped bottom	0.1ml Micro-Insert, 31 x 6mm, clear glass, 15mm top	0.1ml Micro-Insert, 31 x 6mm, clear glass, 12mm top	0.1ml Micro-Insert, 29 x 5.7mm, clear glass, with assembled plastic spring	0.2ml Micro-Insert, 31 x 6mm, clear glass, flat bottom
<b>SILANIZED:</b> 11 09 1241		<b>SILANIZED:</b> 11 09 1242		<b>SILANIZED:</b> 06 09 1240		<b>SILANIZED:</b> 06 09 1343	
100 pcs. per PP-Box	100 pcs. per PP-Box	100 pcs. per PP-Box	100 pcs. per PE-Bag	10 x 100 pcs. per PP-Box	10 x 100 pcs. per PP-Box	10 x 100 pcs. per PP-Box	10 x 100 pcs. per PP-Box

11 09 0999	11 09 1957	11 09 0620	11 09 2275	TPX 11 14 1189	TPX 11 14 1655	PP 11 19 1706	PP 11 19 0932
Short Thread Vial with integrated 0.2ml Micro-Insert, 32 x 11.6mm clear glass, 1 <sup>st</sup> hydrol. class, with label + filling lines	Short Thread Vial with integrated 0.2ml Micro-Insert, 32 x 11.6mm, amber glass, 1 <sup>st</sup> hydrol. class, with label + filling lines	1.1ml Microliter Short Thread Vial ND9, 32 x 11.6mm, clear glass, 1 <sup>st</sup> hydrol. class	0.9ml Total Microliter Short Thread Vial ND9, 32 x 11.6mm, clear glass, 1 <sup>st</sup> hydrolytic class, residual volume <1µ	<b>TopSert</b> TPX Short Thread Vial, 32 x 11.6mm, clear, with integrated 0.2ml Glass Micro-Insert	<b>TopSert</b> TPX Short Thread Vial, 32 x 11.6mm, amber, with integrated 0.2ml Glass Micro-Insert	0.7ml PP Short Thread Micro-Vial, transparent, 32 x 11.6mm	0.3ml PP Short Thread Micro-Vial, transparent, 32 x 11.6mm
		<b>SILANIZED:</b> 11 09 2178		<b>SILANIZED:</b> 11 14 1265	<b>SILANIZED:</b> 11 14 1694		<b>TPX:</b> 11 19 1021
100 pcs. per PP-Box	100 pcs. per PP-Box	100 pcs. per PP-Box	100 pcs. per PP-Box	100 pcs. per PP-Box	100 pcs. per PP-Box	100 pcs. per PE-Bag	100 pcs. per PE-Bag

## 1. Short Thread ND9 (cont.)



LC **PAL**  
HTC **PAL**  
HTS **PAL**



Seal	Cap	with assembled Septa
09 15 0478	9mm PP Short Thread Screw Cap, transparent, centre hole	Natural Rubber red-orange/TEF transparent, 60° shore A, 1.0mm
09 15 0867	9mm PP Short Thread Screw Cap, blue, centre hole	
09 15 1176	9mm PP Short Thread Screw Cap, red, centre hole	RedRubber/PTFE beige, 45° shore A, 1.0mm
09 15 2011	9mm PP Short Thread Screw Cap, transparent, centre hole	
09 15 1819	9mm PP Short Thread Screw Cap, blue, centre hole	UltraClean Silicone white/PTFE red, 55° shore A, 1.0mm
09 15 2012	9mm PP Short Thread Screw Cap, red, centre hole	
09 15 0481	9mm PP Short Thread Screw Cap, transparent, centre hole	PTFE red/Silicone white/PTFE red, 45° shore A, 1.0mm
09 15 0838	9mm PP Short Thread Screw Cap, blue, centre hole	
09 15 1178	9mm PP Short Thread Screw Cap, red, centre hole	Silicone white/PTFE blue, 55° shore A, 1.0mm, with slit
09 15 0480	9mm PP Short Thread Screw Cap, transparent, centre hole	
09 15 0868	9mm PP Short Thread Screw Cap, blue, centre hole	Silicone white / PTFE red, pre-cut (Y) 55° shore A, 1.0mm
09 15 1177	9mm PP Short Thread Screw Cap, red, centre hole	
09 15 0852	9mm PP Short Thread Screw Cap, transparent, centre hole	Packaging Unit: 100 pcs. per PE-Bag
09 15 0869	9mm PP Short Thread Screw Cap, blue, centre hole	
09 15 1179	9mm PP Short Thread Screw Cap, red, centre hole	
09 15 2021	9mm PP Short Thread Screw Cap, transparent, centre hole	
09 15 2016	9mm PP Short Thread Screw Cap, blue, centre hole	

Upon request also available with black, yellow or green Short Thread Cap; also available in blue closed top version

### Magnetic Short Thread Cap



Art. No.	Description Cap	Septa Material	Durometer	Thickn.
09 15 1907	PP Short Thread Cap, blue, 6mm centre hole, with firmly affixed magnetic cap, gold	Silicone white/PTFE red UltraClean	55° shore A	1.0mm

Packaging Unit: 100 pcs. per PE-Bag

### LC/MS Short Thread Cap (One component closure – no bleeding)



Art. No.	Description Cap
09 08 2000	MS-Cap, 9mm Short Thread Cap, transparent with thinned penetration area + diaphragm

- One component closure – absolute no bleeding
- Inert
- Can be penetrated as a septa
- LC/GC MS certified
- Tight closure

Packaging Unit: 100 pcs. per PE-Bag

### UltraBond™ Seals ND9 (Cap + Liner form an unseparatable unit, so that the liner cannot be pushed into the vial even with a blunt needle)



Art. No.	Description Cap	Septa Material	Durometer	Thickn.
09 04 1220	PP Short Thread Cap black, 6mm centre hole	Silicone white/PTFE red	45° shore A	1.3mm
09 04 1533	PP Short Thread Cap blue, 6mm centre hole	Silicone beige/PTFE white	45° shore A	1.3mm
09 04 1534	PP Short Thread Cap blue, 6mm centre hole	Silicone beige/PTFE white, with slit	45° shore A	1.3mm

Packaging Unit: 100 pcs. per PE-Bag

## 2. Snap Ring ND11 (wide opening)



LC **PAL**

HTC **PAL**

HTS **PAL**



We can also supply barcode labelled or pre-sealed Vials!



<b>11 09 0627</b> 1.5ml Snap Ring Vial, 32 x 11.6mm, clear glass, 1 <sup>st</sup> hydrol. class, wide opening	<b>11 09 0644</b> 1.5ml Snap Ring Vial, 32 x 11.6mm, clear glass, 1 <sup>st</sup> hydrol. class, wide opening, label + filling lines	<b>11 09 0645</b> 1.5ml Snap Ring Vial, 32 x 11.6mm, amber glass, 1 <sup>st</sup> hydrol. class, wide opening, label + filling lines	<b>06 09 0357</b> 0.1ml Micro-Insert, 31 x 6mm, clear glass, 15mm top Fill vol. 0.25ml/Usable vol. 0.2ml	<b>06 09 0669</b> 0.1ml Micro-Insert, 31 x 6mm, clear glass, 12mm top Fill vol. 0.3ml/Usable vol. 0.25ml	<b>06 09 0865</b> 0.1ml Micro-Insert, 29 x 5.7mm, clear glass, with assembled plastic spring Fill vol. 0.2ml/Usable vol. 0.1ml	<b>06 09 0866</b> 0.2ml Micro-Insert, 31 x 6mm, clear glass, flat bottom Fill vol. 0.35ml/Usable vol. 0.3ml
100 pcs. per PP-Box	100 pcs. per PP-Box	100 pcs. per PP-Box	<b>SILANIZED: 06 09 1240</b>		<b>SILANIZED: 06 09 1343</b>	
100 pcs. per PP-Box	100 pcs. per PP-Box	100 pcs. per PP-Box	10 x 100 pcs. per PP-Box	10 x 100 pcs. per PP-Box	10 x 100 pcs. per PP-Box	10 x 100 pcs. per PP-Box



<b>11 14 1190</b> <b>TopSert</b> TPX Snap Ring Vial, 32 x 11.6mm, clear, with integrated 0.2ml Glass Micro-Insert	<b>11 14 1656</b> <b>TopSert</b> TPX Snap Ring Vial, 32 x 11.6mm, amber, with integrated 0.2ml Glass Micro-Insert	<b>11 19 0933</b> 0.3ml PP Snap Ring Micro-Vial, transparent, 32 x 11.6mm	<b>11 19 1217</b> 0.3ml PP Snap Ring Micro-Vial, amber, 32 x 11.6mm	<b>11 19 1707</b> 0.7ml PP Snap Ring Micro-Vial, transparent, 32 x 11.6mm, cylindrical Insert	<b>11 19 1022</b> 0.3ml TPX Snap Ring Micro-Vial, crystal clear, 32 x 11.6mm
<b>SILANIZED: 11 14 1266</b>	<b>SILANIZED: 11 14 1695</b>				
100 pcs. per PP-Box	100 pcs. per PP-Box	100 pcs. per PE-Bag	100 pcs. per PE-Bag	100 pcs. per PE-Bag	100 pcs. per PE-Bag

Seal	Cap	
<b>11 15 0635</b>	11 mm PE Snap Ring Cap transparent, centre hole	with assembled Septa
<b>11 15 1267</b>	11 mm PE Snap Ring Cap blue, centre hole	
<b>11 15 1323</b>	11 mm PE Snap Ring Cap red, centre hole	Natural Rubber red-orange/TEF transparent, 60° shore A, 1.0mm
<b>11 15 2106</b>	11 mm PE Snap Ring Cap transparent, centre hole	
<b>11 15 2107</b>	11 mm PE Snap Ring Cap blue, centre hole	RedRubber/PTFE beige, 45° shore A, 1.0mm
<b>11 15 0637</b>	11 mm PE Snap Ring Cap transparent, centre hole	
<b>11 15 1151</b>	11 mm PE Snap Ring Cap blue, centre hole	<b>UltraClean</b> Silicone white/PTFE red, 45° shore A, 1.3mm
<b>11 15 1325</b>	11 mm PE Snap Ring Cap red, centre hole	
<b>11 15 0636</b>	11 mm PE Snap Ring Cap transparent, centre hole	PTFE red/Silicone white/PTFE red, 45° shore A, 1.0mm
<b>11 15 1268</b>	11 mm PE Snap Ring Cap blue, centre hole	
<b>11 15 1324</b>	11 mm PE Snap Ring Cap red, centre hole	Silicone white/PTFE blue, 55° shore A, 1.0mm, cross-slitted
<b>11 15 0650</b>	11 mm PE Snap Ring Cap transparent, centre hole	
<b>11 15 1269</b>	11 mm PE Snap Ring Cap blue, centre hole	Silicone white/PTFE red, pre-cut (Y), 45° shore A, 1.3mm
<b>11 15 1326</b>	11 mm PE Snap Ring Cap red, centre hole	
<b>11 15 2045</b>	11 mm PE Snap Ring Cap transparent, centre hole	with thinned penetration point
<b>11 15 2047</b>	11 mm PE Snap Ring Cap blue, centre hole	
<b>11 08 1676</b>	11 mm PE Push On Cap, blue	

Packaging Unit: 100 pcs. per PE-Bag

Upon request also available with yellow or green Snap Ring Cap! Transparent and blue Snap Ring Caps also available in a soft PE quality! Snap Ring Vials can alternatively be crimped with Standard Aluminium Crimp Seals!

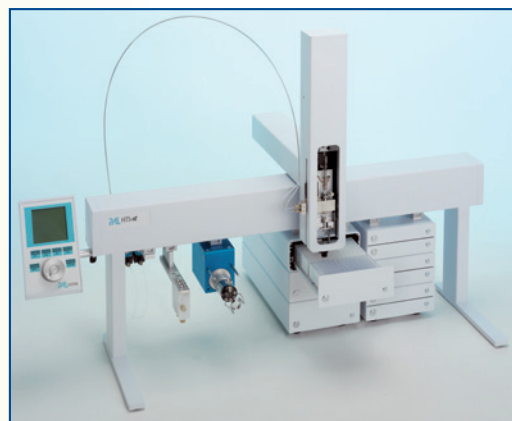
### 3. Screw Neck ND8 (small opening)



LC PAL

HTC PAL

HTS PAL



11 09 0210	11 09 0259	11 09 0419	11 09 0382	11 09 0417	05 09 0129	05 09 0269	05 09 1674	05 09 0968
1.5ml Screw Neck Vial, 32 x 11.6mm, clear glass, 1 <sup>st</sup> hydrol. class, small opening	1.5ml Screw Neck Vial, 32 x 11.6mm, amber glass, 1 <sup>st</sup> hydrol. class, small opening	1.5ml Screw Neck Vial, 32 x 11.6mm, clear glass, 1 <sup>st</sup> hydrol. class, small opening, label + filling lines	1.5ml Screw Neck Vial, 32 x 11.6mm, amber glass, 1 <sup>st</sup> hydrol. class, small opening, label + filling lines	1.1ml Micro-Vial, 32 x 11.6mm, clear glass, 1 <sup>st</sup> hydrol. class, conical	0.1ml Micro-Insert, 31 x 5mm, clear glass, 15mm top	0.1ml Micro-Insert, 31 x 5mm, clear glass, 9mm top	0.2ml Micro-Insert, 31 x 5mm, clear glass, 1 <sup>st</sup> hydrol. class, flat bottom	0.1ml Micro-Insert, 29 x 5mm, clear glass, with assembled plastic spring
100 pcs. per PP-Box	100 pcs. per PP-Box	100 pcs. per PP-Box	100 pcs. per PP-Box	100 pcs. per PP-Box	10 x 100 pcs. per PP-Box	10 x 100 pcs. per PP-Box	10 x 100 pcs. per PP-Box	10 x 100 pcs. per PP-Box

*We can also supply barcode labelled or pre-sealed Vials!*

Seal	Cap	with assembled Septa	Replacement Septa
08 15 0460	8mm Polypropylene Screw Cap, black, centre hole	Natural Rubber red-orange/TEF transparent, 60° shore A, 1.3mm	08 02 0355
08 15 1965	8mm Polypropylene Screw Cap, black, centre hole	RedRubber/PTFE beige, 45° shore A, 1.0mm	08 02 1966
08 15 0293	8mm Polypropylene Screw Cap, black, centre hole	UltraClean Silicone white/PTFE red, 45° shore A, 1.3mm	08 02 0103
08 15 1449	8mm Polypropylene Screw Cap, black, centre hole	Silicone white/PTFE red, with slit, 45° shore A, 1.3mm	
08 15 0294	8mm Polypropylene Screw Cap, black, centre hole	PTFE red/Silicone white/PTFE red, 45° shore A, 1.0mm	08 02 0005
Packaging Unit: 100 pcs. per PE-Bag			1000 pcs. per PE-Bag

Caps/Septa unassembled	Packaging Unit
08 08 0027	8mm Polypropylene Screw Cap, black, centre hole
08 02 0177	8mm Septa, PTFE virginal, 53° shore D, 0.25mm (only unassembled)
08 02 0039	8mm Septa, Silicone white/PTFE blue, 55° shore A, 0.9mm, with slit (only unassembled)
	1000 pcs. per PE-Bag

*Upon request further Screw Seals with different septa and the following caps are available:*

- black, closed top
- white, centre hole
- white, closed top

#### 4. Screw Neck ND10 (wide opening)



LC PAL

HTC PAL

HTS PAL



10 09 0743	10 09 1196	10 09 1197	06 09 0357	06 09 0669	06 09 0865	06 09 0866
1.5ml Screw Neck Vial, 10-425 Thread, 32 x 11.6mm, clear glass, 1 <sup>st</sup> hydrol. class, wide opening	1.5ml Screw Neck Vial, 10-425 Thread, 32 x 11.6mm, clear glass, 1 <sup>st</sup> hydrol. class, wide opening, label + filling lines	1.5ml Screw Neck Vial, 10-425 Thread, 32 x 11.6mm, amber glass, 1 <sup>st</sup> hydrol. class, wide opening, label + filling lines	0.1ml Micro-Insert, 31 x 6mm, clear glass, 15mm top  <b>SILANIZED: 06 09 1240</b>	0.1ml Micro-Insert, 31 x 6mm, clear glass, 12mm top	0.1ml Micro-Insert, 29 x 5.7mm, clear glass, with assembled plastic spring <b>SILANIZED: 06 09 1343</b>	0.2ml Micro-Insert, 31 x 6mm, clear glass, flat bottom
100 pcs. per PP-Box	100 pcs. per PP-Box	100 pcs. per PP-Box	10 x 100 pcs. per PP-Box	10 x 100 pcs. per PP-Box	10 x 100 pcs. per PP-Box	10 x 100 pcs. per PP-Box

*We can also supply barcode labelled or pre-sealed Vials!*

Seal	Cap	with assembled Septa	Replacement Septa
10 15 1256	10mm Polypropylene Screw Cap, black, centre hole	Natural Rubber red-orange/TEF transparent, 60° shore A, 1.3mm	09 02 1259
10 15 1257	10mm Polypropylene Screw Cap, black, centre hole	<b>UltraClean</b> Silicone white/PTFE red, 45° shore A, 1.3mm	09 02 1260
10 15 0744	10mm Polypropylene Screw Cap, black, centre hole	Silicone white/PTFE beige, 45° shore A, 1.5mm	09 02 0723
10 15 1258	10mm Polypropylene Screw Cap, black, centre hole	PTFE red/Silicone white/PTFE red, 45° shore A, 1.0mm	09 02 1261
10 15 1328	10mm Polypropylene Screw Cap, black, centre hole	Silicone white/PTFE blue, with slit, 55° shore A, 1.5mm	09 02 1327
Packaging Unit: 100 pcs. per PE-Bag			1000 pcs. per PE-Bag

*Upon request further Seals are available as closed top version!*

Caps/Septa unassembled		Packaging Unit
10 08 0742	10mm Polypropylene Screw Cap, black, centre hole	100 pcs. per PE-Bag
10 08 1899	10mm Polypropylene Screw Cap, black, closed top	100 pcs. per PE-Bag
10 02 0646	10mm Septa, PTFE virginal, 53° shore D, 0.25mm (only unassembled)	1000 pcs. per PE-Bag
09 02 0723	Silicone white/PTFE beige, 45° shore A, 1.5mm	1000 pcs. per PE-Bag

## 5. Crimp Neck ND11 (wide opening)



LC **PAL**  
HTC **PAL**  
HTS **PAL**



<b>11 09 0356</b>	<b>11 09 0476</b>	<b>11 09 0477</b>	<b>11 09 0619</b>	<b>11 09 2276</b>
1.5ml Crimp Neck Vial, 32 x 11.6mm, clear glass, 1 <sup>st</sup> hydrol. class, wide opening	1.5ml Crimp Neck Vial, 32 x 11.6mm, clear glass, 1 <sup>st</sup> hydrol. class, label + filling lines	1.5ml Crimp Neck Vial, 32 x 11.6mm, amber glass, 1 <sup>st</sup> hydrol. class, wide opening, label + filling lines	1.1ml Microliter Crimp Neck Vial ND11, 32 x 11.6mm, clear glass, 1 <sup>st</sup> hydrol. class <b>SILANIZED: 11 09 2177</b>	0.9ml Total Microliter Snap Ring Vial ND11, 32 x 11.6mm, clear glass, 1 <sup>st</sup> hydrolytic class, residual volume <1µL
100 pcs. per PP-Box	100 pcs. per PP-Box	100 pcs. per PP-Box	100 pcs. per PP-Box	100 pcs. per PP-Box

<b>11 09 0921</b>	<b>11 09 1956</b>	<b>06 09 0357</b>	<b>06 09 0669</b>	<b>06 09 0865</b>	<b>06 09 0866</b>
Crimp Neck Vial with integrated 0.2ml Micro-Insert, 32 x 11.6mm, clear glass, 1 <sup>st</sup> hydrol. class, with label + filling lines	Crimp Neck Vial with integrated 0.2ml Micro-Insert, 32 x 11.6mm, amber glass, 1 <sup>st</sup> hydrol. class, with label + filling lines	0.1ml Micro-Insert, 31 x 6mm, clear glass, 15mm top <b>SILANIZED: 06 09 1240</b>	0.1ml Micro-Insert, 31 x 6mm, clear glass, 12mm top	0.1ml Micro-Insert, 29 x 5.7mm, clear glass, with assembled plastic spring <b>SILANIZED: 06 09 1343</b>	0.2ml Micro-Insert, 31 x 6mm, clear glass, flat bottom
100 pcs. per PP-Box	100 pcs. per PP-Box	10 x 100 pcs. per PP-Box	10 x 100 pcs. per PP-Box	10 x 100 pcs. per PP-Box	10 x 100 pcs. per PP-Box

Seal	Cap	with assembled Septa	Replacement Septa
<b>11 03 0209</b>	11mm Alum. Crimp Cap, clear lacq., centre hole	Natural Rubber red-orange/TEF transparent, 60° shore A, 1.0mm	11 02 0534
<b>11 03 1875</b>	11mm Alum. Crimp Cap, clear lacq., centre hole	RedRubber/PTFE beige, 45° shore A, 1.0mm	11 02 1876
<b>11 03 0247</b>	11mm Alum. Crimp Cap, clear lacq., centre hole	<b>UltraClean</b> Silicone white/PTFE red, 45° shore A, 1.3mm	11 02 0101
<b>11 03 0196</b>	11mm Alum. Crimp Cap, clear lacq., centre hole	PTFE red/Silicone white/PTFE red, 45° shore A, 1.0mm	11 02 0115
<b>11 03 0464</b>	11mm Alum. Crimp Cap, clear lacq., centre hole	Silicone white/PTFE blue, cross-slitted, 55° shore A, 1.5mm	11 02 0446
<b>11 08 1676</b>	11mm PE Push-On Cap, blue	with thinned penetration point	
Packaging Unit: 100 pcs. per PE-Bag			1000 pcs. per PE-Bag

<b>11 06 0006</b>	<b>11 07 0002</b>		<b>12 21 1001</b>	
11mm Crimper	11mm Decapper		Vial Rack, Acrylic, 173 x 95 x 20mm, 50 cavities with a diameter of 12mm	
1 pc. per PP-Box	1 pc. per PP-Box		1 pc.	



## 6. Crimp Neck ND8



COMBI PAL  
GC PAL



<b>08 09 0305</b>	<b>08 09 0258</b>	<b>08 09 0606</b>	<b>08 09 0276</b>	<b>08 09 0405</b>	<b>08 09 0406</b>
0.7ml Micro-Vial, 40 x 7mm, clear glass, 1 <sup>st</sup> hydrol. class, conical	0.7ml Micro-Vial, 40 x 7 mm, amber glass, 1 <sup>st</sup> hydrol. class, conical	0.3ml Micro-Vial, 31.5 x 5.5mm, clear glass, 1 <sup>st</sup> hydrol. class, conical	0.3ml Micro-Vial, 31.5 x 5.5mm, clear glass, 1 <sup>st</sup> hydrol. class, round bottom	0.7ml Crimp Neck Vial, 40 x 7mm, clear glass, 1 <sup>st</sup> hydrol. class, flat bottom	0.7ml Crimp Neck Vial, 40 x 7mm, amber glass, 1 <sup>st</sup> hydrol. class, flat bottom
10 x 100 pcs. per PP-Box	10 x 100 pcs. per PP-Box	10 x 100 pcs. per PP-Box	10 x 100 pcs. per PP-Box	10 x 100 pcs. per PP-Box	10 x 100 pcs. per PP-Box

Seal	Cap	with assembled Septa
<b>08 03 2042</b>	8mm Aluminium Crimp Cap, clear lacquered, centre hole	RedRubber/PTFE beige, 45° shore A, 1.0mm
<b>08 03 0249</b>	8mm Aluminium Crimp Cap, clear lacquered, centre hole	UltraClean Silicone white/PTFE red, 45° shore A, 1.3mm
<b>08 03 0113</b>	8mm Aluminium Crimp Cap, clear lacquered, centre hole	PTFE red/Silicone white/PTFE red, 45° shore A, 1.0mm

Packaging Unit: 100 pcs. per PE-Bag

<b>08 06 0005</b>	<b>08 07 0001</b>	<b>08 21 1000</b>	<b>02 17 0472</b>	<b>02 17 0473</b>
8mm Crimper	8mm Decapper	Vial Rack, Acrylic, 173 x 95 x 20mm, 50 cavities with a diameter of 8.5/3mm	Universal Capillary Connector for 2 columns, for all columns with an ID of 0.20-0.53mm and an OD of 0.30-0.75mm	Universal Y Capillary Connector for 3 columns, for all columns with an ID of 0.20-0.53mm and an OD of 0.30-0.75mm
1 pc. per PP-Box	1 pc. per PP-Box	1 pc.	10 pcs. per PP-Box	1 pc. per PP-Box

## 7. Crimp Neck ND11 (wide opening)



COMBI PAL  
GC PAL



11 09 0356

1.5ml  
Crimp Neck Vial,  
32 x 11.6mm,  
clear glass,  
1<sup>st</sup> hydrol. class,  
wide opening

100 pcs. per PP-Box



11 09 0476

1.5ml  
Crimp Neck Vial,  
32 x 11.6mm,  
clear glass,  
1<sup>st</sup> hydrol. class,  
wide opening,  
label + filling lines

100 pcs. per PP-Box



11 09 0477

1.5ml  
Crimp Neck Vial,  
32 x 11.6mm,  
amber glass,  
1<sup>st</sup> hydrol. class,  
wide opening,  
label + filling lines

100 pcs. per PP-Box



11 09 0619

1.1ml Microliter  
Crimp Neck Vial ND11,  
32 x 11.6mm,  
clear glass,  
1<sup>st</sup> hydrol. class  
**SILANIZED:**  
11 09 2177

100 pcs. per PP-Box



11 09 2276

0.9ml Total Microliter Snap  
Ring Vial ND11,  
32 x 11.6mm,  
clear glass,  
1<sup>st</sup> hydrol. class,  
residual volume <1µ

100 pcs. per PP-Box



11 09 0415

1.1ml  
Micro-Vial,  
32 x 11.6mm,  
clear glass,  
1<sup>st</sup> hydrol. class,  
conical

100 pcs. per PP-Box



11 09 0921

Crimp Neck Vial  
with integrated  
0.2ml Micro-Insert,  
32 x 11.6mm,  
clear glass,  
1<sup>st</sup> hydrol. class,  
with label + filling lines

100 pcs. per PP-Box



11 09 1956

Crimp Neck Vial  
with integrated  
0.2ml Micro-Insert,  
32 x 11.6mm,  
amber glass,  
1<sup>st</sup> hydrol. class,  
with label + filling lines

100 pcs. per PP-Box



11 14 1190

**TPX**  
**TopSert**  
TPX Snap Ring Vial,  
32 x 11.6mm,  
clear, with integrated  
0.2ml Glass Micro-Insert  
**SILANIZED:**  
11 14 1266

100 pcs. per PP-Box



11 14 1656

**TPX**  
**TopSert**  
TPX Snap Ring Vial,  
32 x 11.6mm,  
amber, with integrated  
0.2ml Glass Micro-Insert  
**SILANIZED:**  
11 14 1695

100 pcs. per PP-Box



06 09 0357

0.1ml  
Micro-Insert,  
31 x 6mm,  
clear glass,  
15mm top

**SILANIZED:**  
06 09 1240

10 x 100 pcs. per PP-Box



06 09 0669

0.1ml  
Micro-Insert,  
31 x 6mm,  
clear glass,  
12mm top

**SILANIZED:**  
06 09 1343

10 x 100 pcs. per PP-Box



06 09 0865

0.1ml  
Micro-Insert,  
29 x 5.7mm,  
clear glass,  
with assembled  
plastic spring

**SILANIZED:**  
06 09 1343

10 x 100 pcs. per PP-Box



06 09 0866

0.2ml  
Micro-Insert,  
31 x 6mm,  
clear glass,  
flat bottom

**SILANIZED:**  
06 09 1343

10 x 100 pcs. per PP-Box

Seal	Cap	with assembled Septa
11 03 1494	11 mm Magnetic Crimp Cap, gold, centre hole	Natural Rubber red-orange/TEF transparent, 60° shore A, 1.3mm
11 03 1988	11 mm Magnetic Crimp Cap, gold, centre hole	RedRubber/PTFE beige, 45° shore A, 1.0mm
11 03 0318	11 mm Magnetic Crimp Cap, gold, centre hole	UltraClean Silicone white/PTFE red, 45° shore A, 1.3mm
11 03 0332	11 mm Magnetic Crimp Cap, gold, centre hole	PTFE red/Silicone white/PTFE red, 45° shore A, 1.0mm

Packaging Unit: 100 pcs. per PE-Bag

## 8. Screw Neck ND18



# COMBI PAL



Universal (Headspace + SPME)

<b>18 09 1307</b> <b>18 09 1311</b>	<b>18 09 1306</b> <b>18 09 1310</b>	<b>18 03 1309</b>	<b>18 03 1414</b>	<b>18 03 1578</b>	<b>18 03 1874</b>	<b>18 03 2063</b>	<b>18 03 1416</b>
20ml Screw Neck Vial ND18, 75.5 x 22.5mm, clear/amber glass, 1 <sup>st</sup> hydrol. class, with Precision Thread, rounded bottom	10ml Screw Neck Vial ND18, 46 x 22.5mm, clear/amber glass, 1 <sup>st</sup> hydrol. class, with Precision Thread, rounded bottom	<i>UltraClean-Seal</i> : 18mm Magn. Screw Cap, silver, 8mm centre hole; Silicone blue transp./ PTFE white, 45° shore A, 1.3mm	<i>UltraClean-Seal</i> : 18mm Magn. Screw Cap, silver, 8mm centre hole; Silicone white/PTFE blue, 55° shore A, 1.5mm	<i>UltraClean-Seal</i> : 18mm Magn. Screw Cap, silver, 8mm centre hole; Silicone white/PTFE red, 45° shore A, 1.3mm	18mm Magn. Universal-Screw Cap, open Top; Silicone white/ Aluminium Foil silver, 50° shore A, 1.3mm	<i>UltraClean-Seal</i> : 18mm Magn. Universal Screw Cap, silver, centre hole; Silicone white/PTFE red, 55° shore A, 1.5mm, pre-cut star (*)	18mm Magn. Screw Cap, silver, 8mm centre hole; Butyl red/PTFE grey, 55° shore A, 1.6mm
100 pcs. per PP-Box	100 pcs. per PP-Box	100 pcs. per PE-Bag	100 pcs. per PE-Bag	100 pcs. per PE-Bag	100 pcs. per PE-Bag	100 pcs. per PE-Bag	100 pcs. per PE-Bag
<b>18 03 1666</b>	<b>18 03 1667</b>	<b>17 02 1417</b>	<b>17 02 1318</b>	<b>17 02 1580</b>	<b>17 02 1873</b>	<b>17 02 2062</b>	<b>17 02 1415</b>
18mm Magn. Screw Cap, silver, closed top, Silicone white/PTFE red, 45° shore A, 1.3mm	18mm Magn. Screw Cap, silver, closed top, Butyl red/PTFE grey, 55° shore A, 1.6mm	Septa, Silicone blue transp./ PTFE white, 45° shore A, 1.3mm	Septa, Silicone white/PTFE blue, 55° shore A, 1.5mm	Septa, Silicone white/PTFE red, 45° shore A, 1.3mm	Septa, Silicone white/Alumi- nium foil silver, 50° shore A, 1.3mm	Septa, Silicone white/PTFE red, 55° shore A, 1.5mm, pre-cut star (*)	Septa, Butyl red/PTFE grey, 55° shore A, 1.6mm
100 pcs. per PE-Bag	100 pcs. per PE-Bag	1.000 pcs. per PE-Bag	1.000 pcs. per PE-Bag	1.000 pcs. per PE-Bag	1.000 pcs. per PE-Bag	1.000 pcs. per PE-Bag	1.000 pcs. per PE-Bag
<ul style="list-style-type: none"> <li>comparable results regarding tightness as with Crimp Neck Headspace Vials due to the precision thread that draws the septa tight against the vial</li> <li>reproducible results, as untightnesses due to crimping faults by incorrectly adjusted or non-adjustable crimpers are excluded</li> <li>samples can be taken and stored directly in the field in the analysis vial, so that a later sample transfer in the lab is unnecessary</li> <li>8mm centre hole of the cap offers enough space for the SPME-Phase for a safe penetration</li> <li><i>UltraClean</i> 1.3 / 1.5mm thick Silicone/PTFE septa offers good stability and excellent sealing at even high pressure in the vial</li> <li>thin and easy to penetrate Silicone/PTFE septa in different qualities</li> <li>alternatively 1.6mm thick, 55° shore A hard Butyl/PTFE septa as a less cost-intensive alternative for a lower temperature range and for uncritical analysis in the Headspace field</li> <li>no more transportation problems in the autosampler with incorrectly crimped vials</li> <li>more convenient and easier to open and to close</li> <li>can be used for Headspace analysis as well as for SPME application</li> <li>no additional costs for crimping tools</li> <li>time and energy saving closure technique</li> <li>20ml Vials can be supplied in combination with a seal of your choice as 2in1 KITs</li> </ul>							

## 9. Crimp Neck ND20



# COMBI PAL



HS

Standard (Headspace)				Special (SPME)	
<b>20 09 0873</b>	<b>20 09 1690</b>	<b>20 09 1405</b>	<b>20 09 1691</b>	<b>20 09 1222</b>	
20ml Headspace-Vial, 75.5 x 22.5mm, clear glass, 1 <sup>st</sup> hydrol. class, DIN-crimp neck, long neck, rounded bottom	20ml Headspace-Vial, 75.5 x 22.5mm, amber glass, 1 <sup>st</sup> hydrol. class, DIN-crimp neck, long neck, rounded bottom	10ml Headspace-Vial, 46 x 22.5mm, clear glass, 1 <sup>st</sup> hydrol. class, DIN-crimp neck, rounded bottom	10ml Headspace-Vial, 46 x 22.5mm, amber glass, 1 <sup>st</sup> hydrol. class, DIN-crimp neck, rounded bottom	20ml SPME Vial, 75.5 x 22.5mm, clear glass, 1 <sup>st</sup> hydrol. class, rounded bottom, special crimp neck	
100 pcs. per PP-Box	100 pcs. per PP-Box	100 pcs. per PP-Box	100 pcs. per PP-Box	100 pcs. per PP-Box	
<b>20 03 0665*</b>		<b>20 03 0975</b>		<b>20 03 1536</b>	<b>20 03 1246</b>
UltraClean-Seal: 20mm Magn. Crimp Cap, special alloy, gold lacquered, 5mm centre hole; Silic. blue transp./PTFE transp., 45° shore A, 3.0mm		UltraClean-Seal: 20mm Magn. Crimp Cap, special alloy, gold lacquered, 8mm centre hole; Silic. blue transp./PTFE transp., 45° shore A, 3.0mm		UltraClean-Seal: 20mm Magn. Bimetal-Crimp Cap, red lacquered, 8mm centre hole; Silic. blue transp./PTFE transp., 45° shore A, 3.0mm	UltraClean-Seal: 20mm Magn. Crimp Cap, special alloy, gold lacquered, 8mm centre hole; Silicone white/PTFE blue, 55° shore A, 1.5mm
100 pcs. per PE-Bag		100 pcs. per PE-Bag		100 pcs. per PE-Bag	100 pcs. per PE-Bag
<b>20 02 2054</b>				<b>20 02 1244</b>	<b>20 02 1263</b>
UltraClean Closure: 20mm Septa, Silicone transparent blue/PTFE transparent, 45° shore A, 3.0mm				20mm Septa, Silicone white/PTFE blue, 55° shore A, 1.5mm	20mm Septa, Viton 1A black, 70° shore A, 1.0mm
Packaging Unit: 1000 pcs. per PE-Bag					

\* only suitable for the following autosamplers: Carlo Erba HS500/HS800, CTC 500, Fisons HS500/HS800, Varian/Chrompack 9020/25

<b>20 06 0008</b> 20mm Crimper	<b>20 07 0004</b> 20mm Decapper		<b>20 06 2229</b> 20mm Crimper, made of stainless steel, sterilizable for cleanroom applications	<b>20 06 2230</b> 20mm Decapper, made of stainless steel, sterilizable for cleanroom applications	
1 pc. per PP-Box	1 pc. per PP-Box		1 pc. per PP-Box	1 pc. per PP-Box	

All stainless steel crimping tools also available in 8mm, 11mm and 13mm.

## 9. Crimp Neck ND20 (cont.)

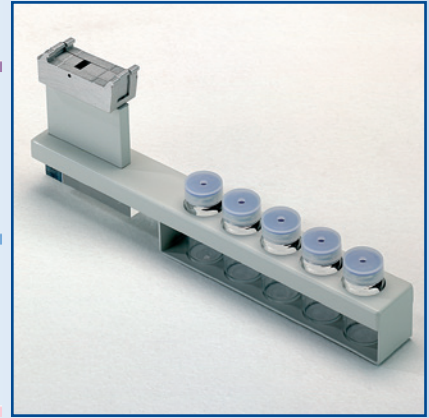




LC **PAL**

HTC **PAL**

HTS **PAL**

GC **PAL** COMBI **PAL**



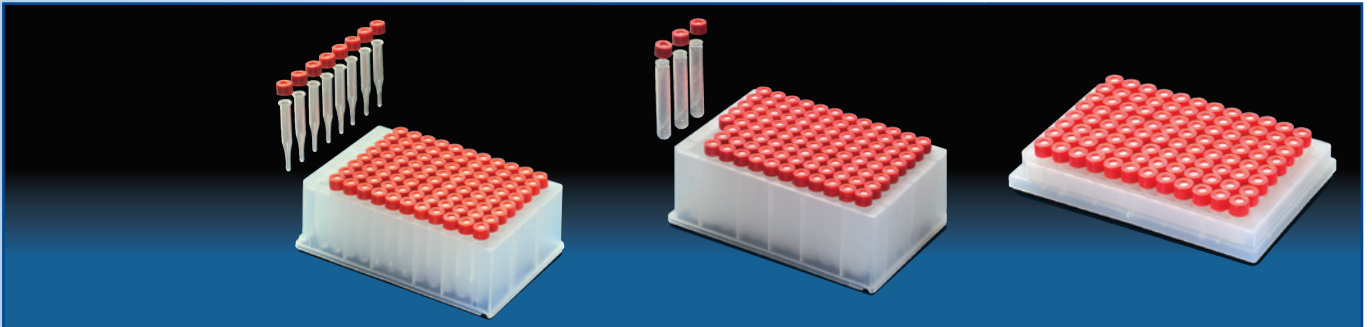
Washer Bottle		Washer Bottle	
			
<b>20 09 1822</b>		<b>20 09 1405</b>	
100ml Crimp Neck Vial, 49 x 75mm, clear glass, 1 <sup>st</sup> hydrolytic class, DIN-Crimp Neck		10ml Headspace-Vial, 46 x 22.5mm, clear glass, 1 <sup>st</sup> hydrolytic class, DIN-Crimp Neck, rounded bottom	
4 pcs. in a cardboard box		100 pcs. per PP-Box	
<b>22 15 1824</b>	<b>22 15 1869</b>	<b>22 15 1334</b>	
22mm Combination Seal: PE Cap, transparent, centre hole, cap height 9.1mm; Silicone transparent blue/PTFE white, 45° shore A, 1.3mm, Y-slitted	22mm Combination Seal: PE Cap, transparent, 6mm centre hole, cap height 9.1mm; Silicone transparent blue/PTFE white, 45° shore A, 1.3mm, Y-slitted	22mm Combination Seal: PE Cap, transparent, centre hole, cap height 9.1mm; Silicone transparent blue/PTFE white, 45° shore A, 1.3mm	
100 pcs. per PE-Bag			






## 10. 96 Position Block Systems



HTS **PAL**  
HTC **PAL**



Filled Block	08 20 0897	08 20 0911	08 20 0943
	Deep Well Block „riplate“, PP, 96 Positions (RITTER), filled with 0.35ml DW-Micro-Insert, 42.5 x 6mm, clear glass, 17mm top, with assembled 9mm PE Cap red, 9 x 5.9mm, 4mm centre hole, Silicone white/PTFE red, with slit, 45° shore A, 1.9mm	Square Well Block „riplate“, PP, 96 Positions (RITTER), filled with 1ml SQW-Micro-Insert, 45.9 x 7.6mm, clear glass, round bottom, with assembled 9mm PE Cap red, 9 x 5.9mm, 4mm centre hole, Silicone white/PTFE red, with slit, 45° shore A, 1.9mm	Microtiter-Plate, PP, 96 Positions (RITTER), filled with 0.1ml MTP-Micro-Insert, 15.5 x 5.7mm, clear glass, flat bottom, with assembled 9mm PE Cap red, 9 x 5.9mm, 4mm centre hole, Silicone white/PTFE red, with slit, 45° shore A, 1.9mm
	08 05 0890 + 08 14 0889	08 05 0894 + 08 14 0910	08 05 0944 + 08 14 0876
Micro-Insert + Seal	08 14 0889	08 14 0910	08 14 0876
	0.35ml DW-Micro-Insert, 42.5 x 6mm, clear glass, 17mm top, with assembled 9mm PE Cap red, 9 x 5.9mm, 4mm centre hole, Silicone white/PTFE red, with slit, 45° shore A, 1.9mm	1ml SQW-Micro-Insert, 45.9 x 7.6mm, clear glass, round bottom, with assembled 9mm PE Cap red, 9 x 5.9mm, 4mm centre hole, Silicone white/PTFE red, with slit, 45° shore A, 1.9mm	0.1ml MTP-Micro-Insert, 15.5 x 5.7mm, clear glass, flat bottom, with assembled 9mm PE Cap red, 9 x 5.9mm, 4mm centre hole, Silicone white/PTFE red, with slit, 45° shore A, 1.9mm
	08 09 0888 + 09 15 0763	08 09 0909 + 09 15 0763	08 09 0875 + 09 15 0763
			
Micro-Insert	08 09 0888	08 09 0909	08 09 0875
	0.35ml DW-Micro-Insert, 42.5 x 6mm, clear glass, 17mm top	1ml SQW-Micro-Insert, 45.9 x 7.6mm, clear glass, round bottom	0.1ml MTP-Micro-Insert, 15.5 x 5.7mm, clear glass, flat bottom
Seal	09 15 0763	09 15 0763	09 15 0763
	9mm PE Cap red, 9 x 5.9mm, 4mm centre hole, Silicone white/PTFE red, with slit, 45° shore A, 1.9mm	9mm PE Cap red, 9 x 5.9mm, 4mm centre hole, Silicone white/PTFE red, with slit, 45° shore A, 1.9mm	9mm PE Cap red, 9 x 5.9mm, 4mm centre hole, Silicone white/PTFE red, with slit, 45° shore A, 1.9mm
Block	08 05 0890	08 05 0894	08 05 0944
	Deep Well Block „riplate“, Polypropylene, 96 Positions (RITTER)	Square Well Block „riplate“, Polypropylene, 96 Positions (RITTER)	Microtiter-Plate, Polypropylene, 96 Positions (RITTER)

## 11. General Consumables

### 17mm HPLC Syringe Filters, 25mm ProFill HPLC Syringe Filters and 30mm HPLC Syringe Filters with Glass Fibre Prefilter

<b>17 16 2076</b>	<b>17 16 2077</b>	<b>17 16 2078</b>	<b>17 16 2079</b>	<b>17 16 2080</b>	<b>17 16 2081</b>	<b>17 16 2082</b>	<b>17 16 2083</b>
17mm HPLC Syringe Filter PTFE, 0.2µm, Injection-moulded ring blue + Print of the membrane type	17mm HPLC Syringe Filter PTFE, 0.45µm, Injection-moulded ring yellow + Print of the membrane type	17mm HPLC Syringe Filter Regenerated Cellulose (RC), 0.2µm, Injection-moulded ring grey + Print of the membrane type	17mm HPLC Syringe Filter Regenerated Cellulose (RC), 0.45µm, Injection-moulded ring brown + Print of the membrane type	17mm HPLC Syringe Filter Nylon (PA), 0.2µm, Injection-moulded ring purple + Print of the membrane type	17mm HPLC Syringe Filter Nylon (PA), 0.45µm, Injection-moulded ring green + Print of the membrane type	17mm HPLC Syringe Filter Glass Fibre Prefilter/PVDF 0.2µm, Injection-moulded ring black + Print of the membrane type	17mm HPLC Syringe Filter Glass Fibre Prefilter/PVDF 0.45µm, Injection-moulded ring red + Print of the membrane type
Hydrophobic (water repellent)	Hydrophobic (water repellent)	Hydrophilic	Hydrophilic	Hydrophilic	Hydrophilic	Hydrophilic	Hydrophilic
100 pcs. per PE-Bag, add. packed in a blue PP-Box							

<b>25 16 0346</b>	<b>25 16 0347</b>	<b>25 16 0348</b>	<b>25 16 0349</b>	<b>25 16 0350</b>	<b>25 16 0351</b>
25mm HPLC Syringe Filter, PTFE, green, 0.20µm	25mm HPLC Syringe Filter, PTFE, natural, 0.45µm	25mm HPLC Syringe Filter, Regenerated Cellulose (RC), blue, 0.20µm	25mm HPLC Syringe Filter, Regenerated Cellulose (RC), yellow, 0.45µm	25mm HPLC Syringe Filter, Nylon (PA), bright blue, 0.20µm	25mm HPLC Syringe Filter, Nylon (PA), bright green, 0.45µm
100 pcs. per PE-Bag add. packed in a blue PP-Box	100 pcs. per PE-Bag add. packed in a blue PP-Box	100 pcs. per PE-Bag add. packed in a blue PP-Box	100 pcs. per PE-Bag add. packed in a blue PP-Box	100 pcs. per PE-Bag add. packed in a blue PP-Box	100 pcs. per PE-Bag add. packed in a blue PP-Box
100 pcs. per PE-Bag, add. packed in a blue PP-Box					

<b>30 16 2086</b>	<b>30 16 2087</b>	<b>30 16 2088</b>	<b>30 16 2089</b>	<b>30 16 2090</b>	<b>30 16 2091</b>	<b>30 16 2092</b>	<b>30 16 2093</b>
30mm HPLC Syringe Filter Glass Fibre Prefilter/ PTFE, 0.2µm, Injection-moulded ring blue + Print of the membrane type	30mm HPLC Syringe Filter Glass Fibre Prefilter/ PTFE, 0.45µm, Injection-moulded ring yellow + Print of the membrane type	30mm HPLC Syringe Filter Glass Fibre Prefilter/ Regenerated Cellulose (RC), 0.2µm, Injection-moulded ring grey + Print of the membrane type	30mm HPLC Syringe Filter Glass Fibre Prefilter/ Regenerated Cellulose (RC), 0.45µm, Injection-moulded ring brown + Print of the membrane type	30mm HPLC Syringe Filter Glass Fibre Prefilter/ Nylon (PA), 0.2µm, Injection-moulded ring purple + Print of the membrane type	30mm HPLC Syringe Filter Glass Fibre Prefilter/ Nylon (PA), 0.45µm, Injection-moulded ring green + Print of the membrane type	30mm HPLC Syringe Filter Glass Fibre Prefilter/ PVDF 0.2µm, Injection-moulded ring black + Print of the membrane type	30mm HPLC Syringe Filter Glass Fibre Prefilter/ PVDF 0.45µm, Injection-moulded ring red + Print of the membrane type
Hydrophobic (water repellent)	Hydrophobic (water repellent)	Hydrophilic	Hydrophilic	Hydrophilic	Hydrophilic	Hydrophilic	Hydrophilic
100 pcs. per PE-Bag, add. packed in a blue PP-Box							

### GC Injection Port Septa

<b>07 18 0935</b>	<b>09 18 0936</b>	<b>10 18 0937</b>	<b>11 18 0938</b>	<b>12 18 0939</b>	<b>17 18 0940</b>
Shimadzu Plug, transparent	9.5mm Universal HT Injection Port Septa, transparent	10mm Universal HT Injection Port Septa, transparent	11mm Universal HT Injection Port Septa, transparent	12.5mm Universal HT Injection Port Septa, transparent	17mm Universal HT Injection Port Septa, transparent
25 pcs. in an amber Screw Neck Vial	25 pcs. in an amber Screw Neck Vial	25 pcs. in an amber Screw Neck Vial	25 pcs. in an amber Screw Neck Vial	25 pcs. in an amber Screw Neck Vial	25 pcs. in an amber Screw Neck Vial
<b>Shimadzu, all models</b>	<b>Agilent (HP),</b> 5700/5880 Series <b>Varian,</b> Injector Type: Packed Columns <b>Varian (CP),</b> all models <b>Tracor,</b> 550, 560 <b>Gow-Mac,</b> all models <b>Finnigan,</b> 9001, QCQ™ <b>Antek Unicam,</b> 4600	<b>Agilent (HP),</b> 5890/6890 Series 5700/5880 Series <b>Varian,</b> Injector Type: Packed Columns Injector Type: Split/Splitless	<b>Agilent (HP),</b> 5890/6890 Series 5880A Series <b>Varian,</b> 3300, 3400, 3500, 3600, 3700, Vista (Split/Splitless) <b>Perkin Elmer,</b> Sigma Series, 900, 990 8000 Series Autosys	<b>Tracor,</b> 220, 222	<b>ThermoQuest,</b> Trace <b>Fisons/Carlo Erba</b> 8000 Series

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