

Dr. Maisch

Any column, Any size, Any Media



REPROSHELL[®]

核壳色谱柱

MADE BY DR. MAISCH

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A 3D rendering of HPLC column components, including a large black column with a blue inner core, a smaller black column, and a blue spherical particle, all set against a white background.

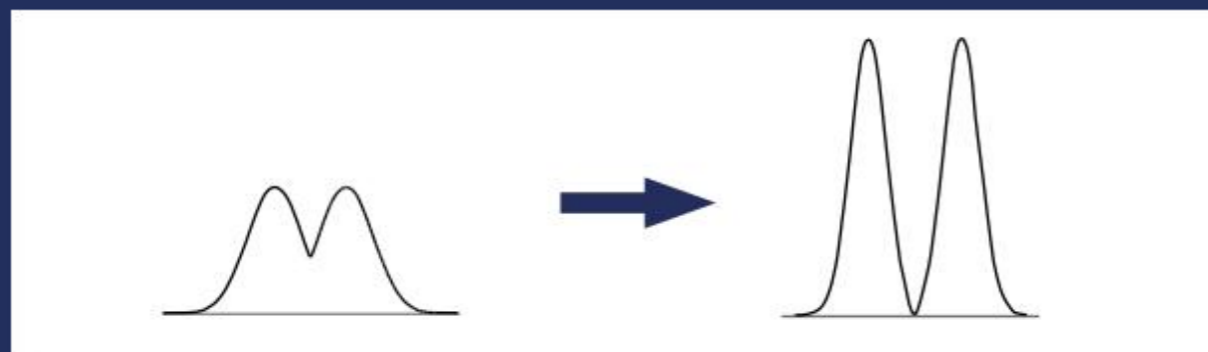
REPROSHELL
MADE BY DR. MAISCH

来自欧洲最大的高效液相色谱 (HPLC) 柱制造商之一。

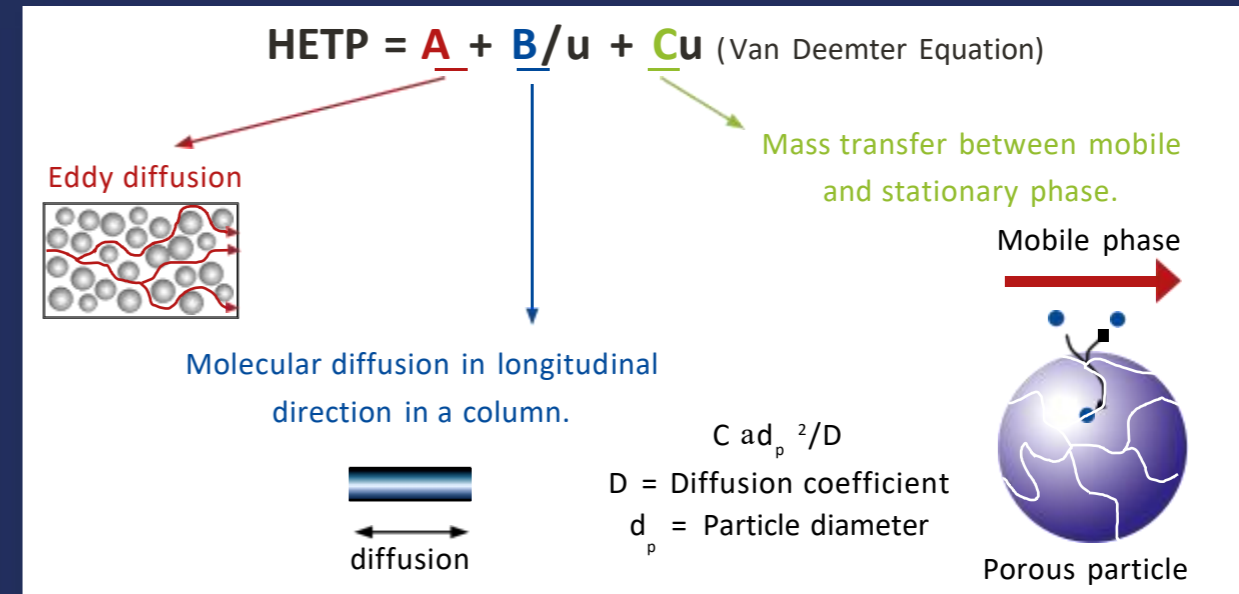
核壳颗粒



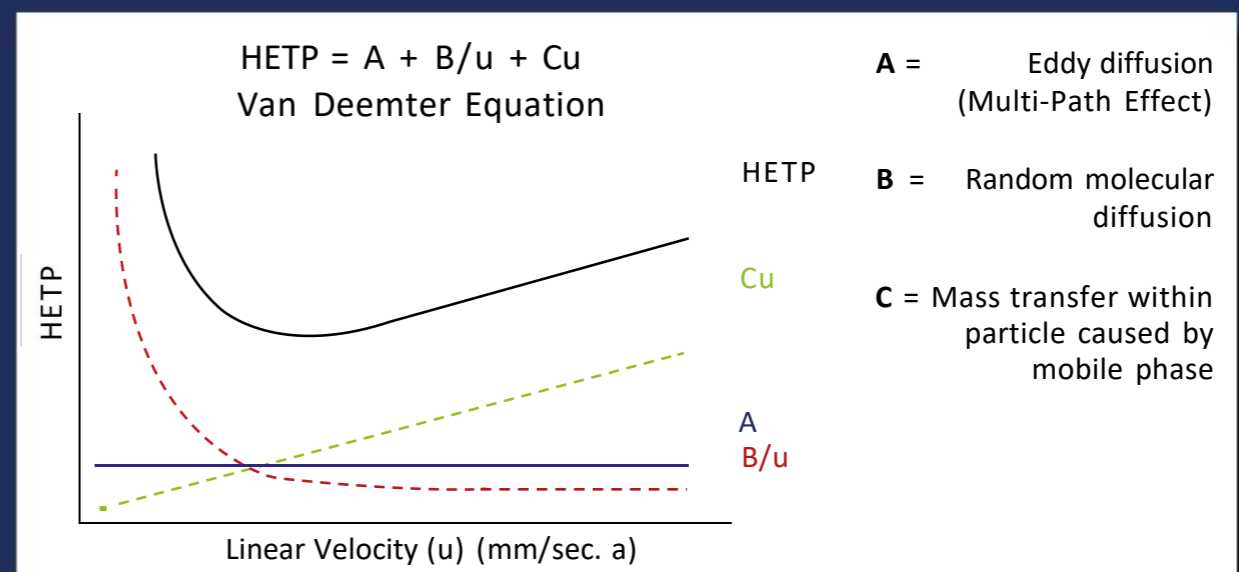
核壳颗粒由一个实心（非多孔）核和一个多孔层（壳）组成，与相同粒径的全多孔颗粒相比，它们表现出相同的背压下效率更高。



ReproShell – 范德姆特方程



范德姆特图

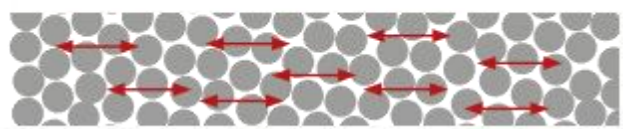


A-TERM (涡流扩散, 多径效应)

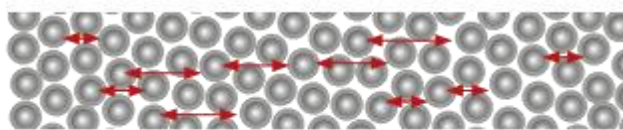


核壳颗粒具有更紧密的粒径分布, 这导致了更均匀、有序的床层结构, 减少了多路径效应的影响。

B-Term (纵向扩散)

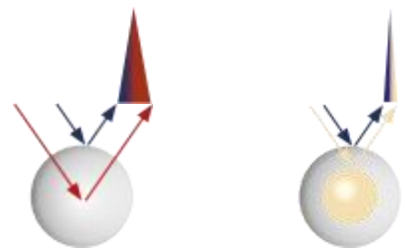


全多孔颗粒: 扩散发生在多孔颗粒内部以及颗粒间隙中



核壳颗粒: 实心核阻止纵向扩散

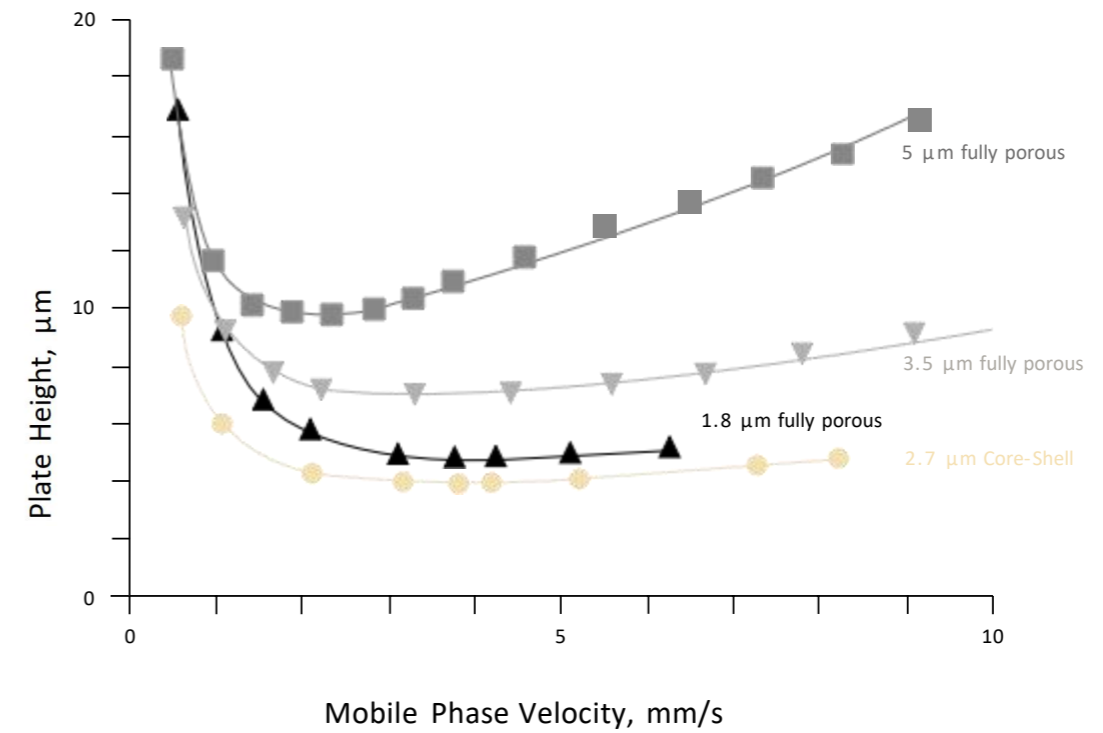
C-Term (质量传递)



实心核导致了更短的扩散路径。



实心核壳与全多孔颗粒的比较



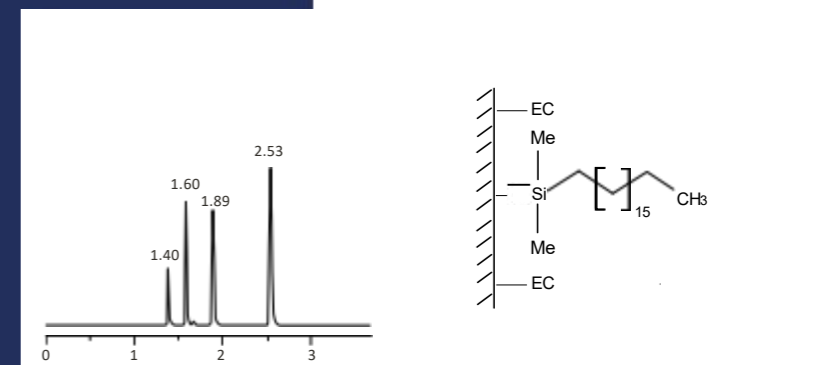
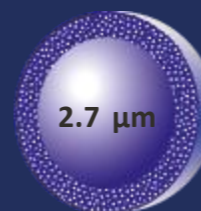
ReproShell – 可提供的固定相

粒径 2.7 μm and 5 μm

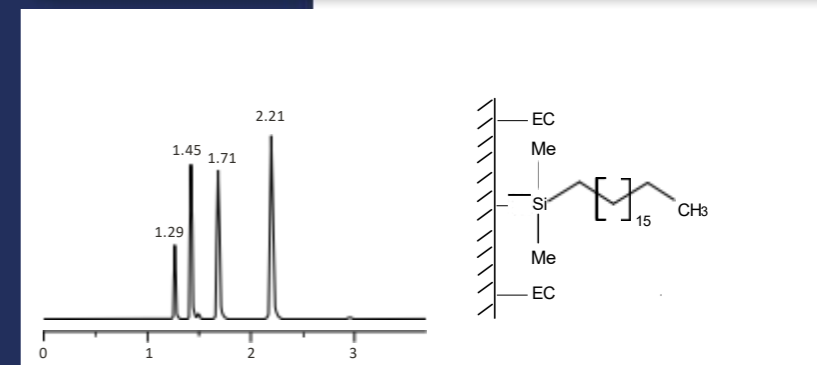
根据UPLC与HPLC的性能及背压提供各种选择性

- ODS-1 (highly retentive C18)
- ODS-3 (trifunctional C18)
- C8
- Biphenyl
- Phenylhexyl
- PFP (Penta fluoro phenyl)
- Silica
- HILIC

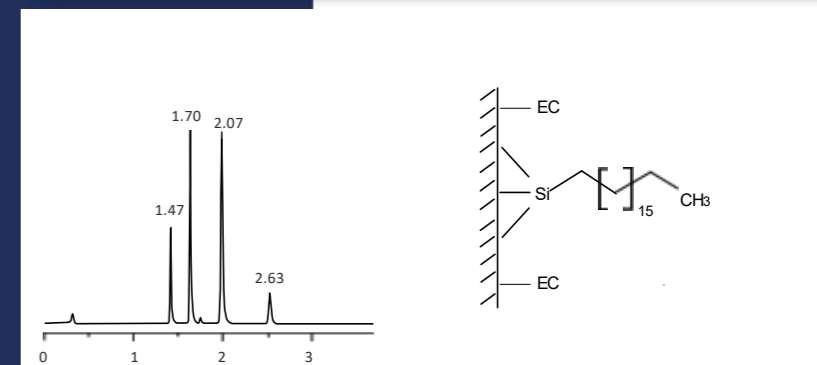
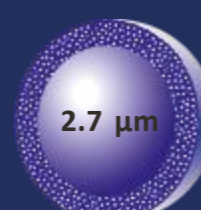
ReproShell ODS - 1
2.7 μm



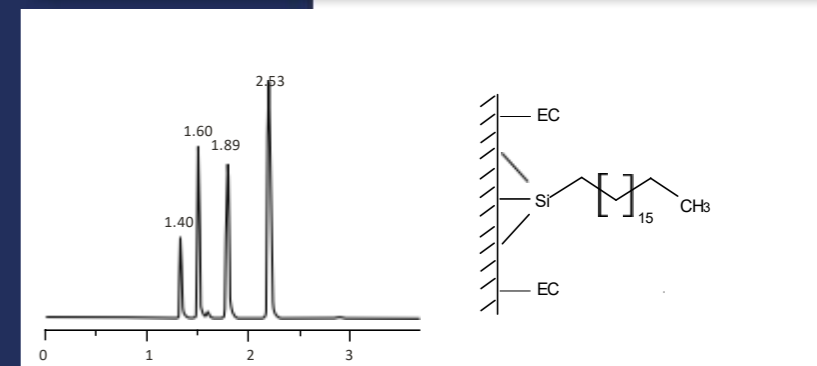
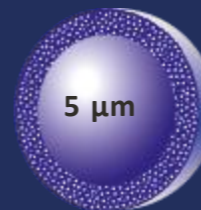
ReproShell ODS - 1
5 μm



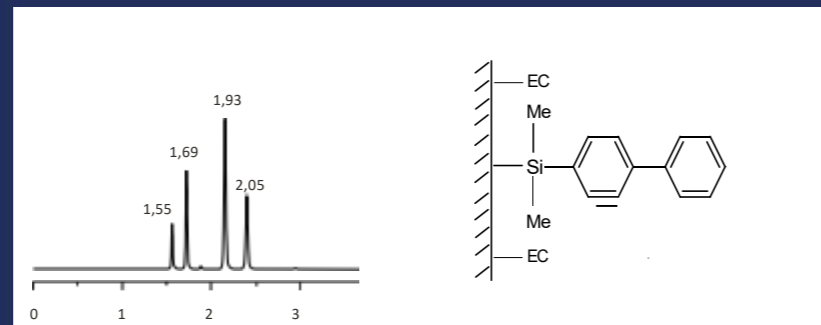
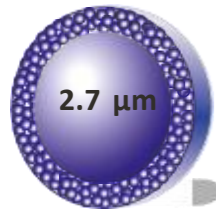
ReproShell ODS - 3
2.7 μm



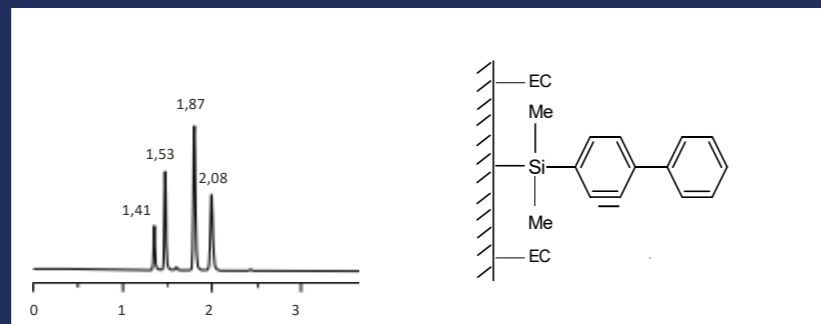
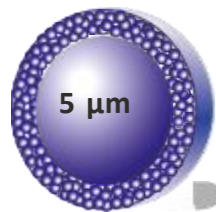
ReproShell ODS - 3
5 μm



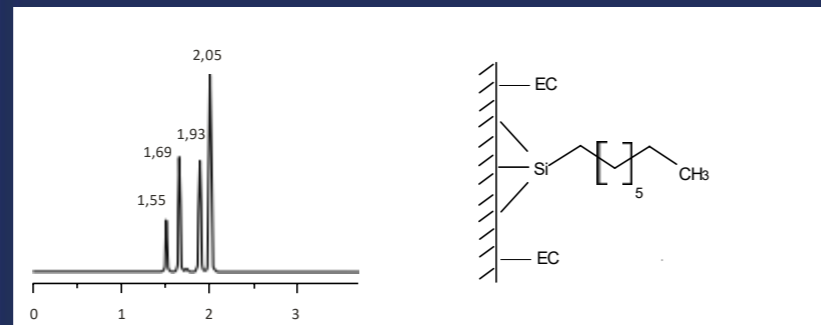
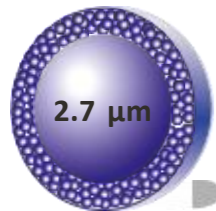
ReproShell Biphenyl,
2.7 μm



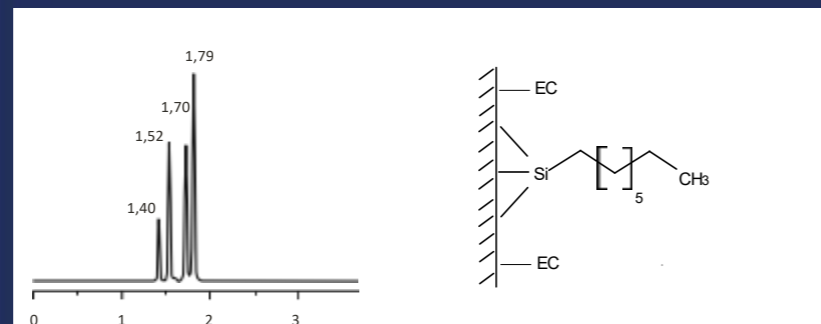
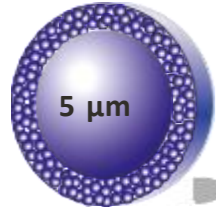
ReproShell Biphenyl,
5 μm



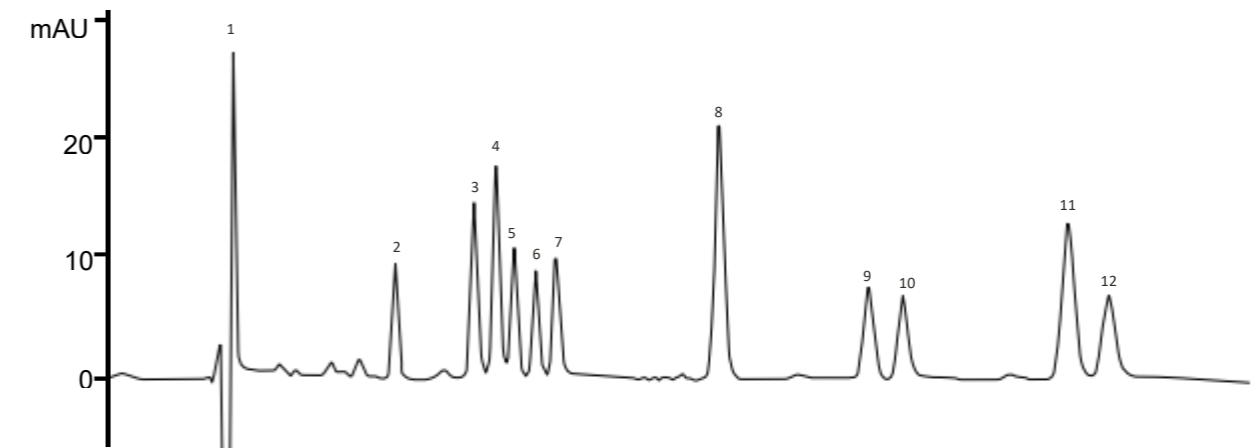
ReproShell C8,
2.7 μm



ReproShell C8,
5 μm



HPLC-UV 11 种大麻素的分析



- | | | |
|------------|----------|----------|
| 1 - THCA | 5 - CBGA | 9 - CBDV |
| 2 - D9 THC | 6 - CBG | 10 - CBN |
| 3 - D8 THC | 7 - CBDA | 11 - CBC |
| 4 - THCV | 8 - CBD | |

Column: Reproshell ODS-1, 2.7 μm um, 150 x 4,6 mm
Mobile Phase A: Acetonitrile w / 0.1 % formic acid
Mobile Phase B: Water w / 0.1 % formic acid
Mobile Phase Composition: 75/25 - A/B - Isocratic
Flow rate: 2 mL/min
Back pressure: 220-230 bar
Detection: 228 nm
Run Time: 7 minutes
Reference Standard: Cayman Chemical, Prod No. 32842

Chromatogramme and method courtesy of www.seedlessanalytical.com

AVAILABLE COLUMNS

AVAILABLE COLUMNS

Coreshell RP-Phase with nonporous core and porous shell

Particle size 5 µm	20 x 2 mm	30 x 2 mm	50 x 2 mm	75 x 2 mm	100 x 2 mm	125 x 2 mm	150 x 2 mm	5 x 2 mm 3/pck
ReproShellODS-1	cs15.91.s0202	cs15.91.s0302	cs15.91.s0502	cs15.91.s0702	cs15.91.s1002	cs15.91.s1202	cs15.91.s1502	cs15.91.v0002
ReproShellODS-3	cs15.93.s0202	cs15.93.s0302	cs15.93.s0502	cs15.93.s0702	cs15.93.s1002	cs15.93.s1202	cs15.93.s1502	cs15.93.v0002
ReproShell C8	cs15.8e.s0202	cs15.8e.s0302	cs15.8e.s0502	cs15.8e.s0702	cs15.8e.s1002	cs15.8e.s1202	cs15.8e.s1502	cs15.8e.v0002
ReproShell Biphenyl	cs15.bpe.s0202	cs15.bpe.s0302	cs15.bpe.s0502	cs15.bpe.s0702	cs15.bpe.s1002	cs15.bpe.s1202	cs15.bpe.s1502	cs15.bpe.v0002
ReproShell Phenylhexyl	cs15.ph.s0202	cs15.ph.s0302	cs15.ph.s0502	cs15.ph.s0702	cs15.ph.s1002	cs15.ph.s1202	cs15.ph.s1502	cs15.ph.v0002
ReproShell PFP	cs15.pfp.s0202	cs15.pfp.s0302	cs15.pfp.s0502	cs15.pfp.s0702	cs15.pfp.s1002	cs15.pfp.s1202	cs15.pfp.s1502	cs15.pfp.v0002
ReproShell Silica	cs15.00.s0202	cs15.00.s0302	cs15.00.s0502	cs15.00.s0702	cs15.00.s1002	cs15.00.s1202	cs15.00.s1502	cs15.00.v0002

Particle size 2,7 µm	20 x 3 mm	30 x 3 mm	50 x 3 mm	75 x 3 mm	100 x 3 mm	125 x 3 mm	150 x 3 mm	5 x 3 mm 3/pck
ReproShellODS-1	cs27.91.s0203	cs27.91.s0303	cs27.91.s0503	cs27.91.s0703	cs27.91.s1003	cs27.91.s1203	cs27.91.s1503	cs27.91.v0003
ReproShellODS-3	cs27.93.s0203	cs27.93.s0303	cs27.93.s0503	cs27.93.s0703	cs27.93.s1003	cs27.93.s1203	cs27.93.s1503	cs27.93.v0003
ReproShell C8	cs27.8e.s0203	cs27.8e.s0303	cs27.8e.s0503	cs27.8e.s0703	cs27.8e.s1003	cs27.8e.s1203	cs27.8e.s1503	cs27.8e.v0003
ReproShell Biphenyl	cs27.bpe.s0203	cs27.bpe.s0303	cs27.bpe.s0503	cs27.bpe.s0703	cs27.bpe.s1003	cs27.bpe.s1203	cs27.bpe.s1503	cs27.bpe.v0003
ReproShell Phenylhexyl	cs27.ph.s0203	cs27.ph.s0303	cs27.ph.s0503	cs27.ph.s0703	cs27.ph.s1003	cs27.ph.s1203	cs27.ph.s1503	cs27.ph.v0003
ReproShell PFP	cs27.pfp.s0203	cs27.pfp.s0303	cs27.pfp.s0503	cs27.pfp.s0703	cs27.pfp.s1003	cs27.pfp.s1203	cs27.pfp.s1503	cs27.pfp.v0003
ReproShell Silica	cs27.00.s0203	cs27.00.s0303	cs27.00.s0503	cs27.00.s0703	cs27.00.s1003	cs27.00.s1203	cs27.00.s1503	cs27.00.v0003

AVAILABLE COLUMNS

Particle size 2,7 µm	20 x 4 mm	30 x 4 mm	50 x 4 mm	75 x 4 mm	100 x 4 mm	125 x 4 mm	150 x 4 mm	5 x 4 mm 3/pck
ReproShellODS-1	cs27.91.s0204	cs27.91.s0304	cs27.91.s0504	cs27.91.s0704	cs27.91.s1004	cs27.91.s1204	cs27.91.s1504	cs27.91.v0004
ReproShellODS-3	cs27.93.s0204	cs27.93.s0304	cs27.93.s0504	cs27.93.s0704	cs27.93.s1004	cs27.93.s1204	cs27.93.s1504	cs27.93.v0004
ReproShell C8	cs27.8e.s0204	cs27.8e.s0304	cs27.8e.s0504	cs27.8e.s0704	cs27.8e.s1004	cs27.8e.s1204	cs27.8e.s1504	cs27.8e.v0004
ReproShell Biphenyl	cs27.bpe.s0204	cs27.bpe.s0304	cs27.bpe.s0504	cs27.bpe.s0704	cs27.bpe.s1004	cs27.bpe.s1204	cs27.bpe.s1504	cs27.bpe.v0004
ReproShell Phenylhexyl	cs27.ph.s0204	cs27.ph.s0304	cs27.ph.s0504	cs27.ph.s0704	cs27.ph.s1004	cs27.ph.s1204	cs27.ph.s1504	cs27.ph.v0004
ReproShell PFP	cs27.pfp.s0204	cs27.pfp.s0304	cs27.pfp.s0504	cs27.pfp.s0704	cs27.pfp.s1004	cs27.pfp.s1204	cs27.pfp.s1504	cs27.pfp.v0004
ReproShell Silica	cs27.00.s0204	cs27.00.s0304	cs27.00.s0504	cs27.00.s0704	cs27.00.s1004	cs27.00.s1204	cs27.00.s1504	cs27.00.v0004

Particle size 2,7 µm	20 x 4.6 mm	30 x 4.6 mm	50 x 4.6 mm	75 x 4.6 mm	100 x 4.6 mm	125 x 4.6 mm	150 x 4.6 mm	5 x 4.6mm 3/pck
ReproShellODS-1	cs27.91.s0246	cs27.91.s0346	cs27.91.s0546	cs27.91.s0746	cs27.91.s1046	cs27.91.s1246	cs27.91.s1546	cs27.91.v0046
ReproShellODS-3	cs27.93.s0246	cs27.93.s0346	cs27.93.s0546	cs27.93.s0746	cs27.93.s1046	cs27.93.s1246	cs27.93.s1546	cs27.93.v0046
ReproShell C8	cs27.8e.s0246	cs27.8e.s0346	cs27.8e.s0546	cs27.8e.s0746	cs27.8e.s1046	cs27.8e.s1246	cs27.8e.s1546	cs27.8e.v0046
ReproShell Biphenyl	cs27.bpe.s0246	cs27.bpe.s0346	cs27.bpe.s0546	cs27.bpe.s0746	cs27.bpe.s1046	cs27.bpe.s1246	cs27.bpe.s1546	cs27.bpe.v0046
ReproShell Phenylhexyl	cs27.ph.s0246	cs27.ph.s0346	cs27.ph.s0546	cs27.ph.s0746	cs27.ph.s1046	cs27.ph.s1246	cs27.ph.s1546	cs27.ph.v0046
ReproShell PFP	cs27.pfp.s0246	cs27.pfp.s0346	cs27.pfp.s0546	cs27.pfp.s0746	cs27.pfp.s1046	cs27.pfp.s1246	cs27.pfp.s1546	cs27.pfp.v0046
ReproShell Silica	cs27.00.s0246	cs27.00.s0346	cs27.00.s0546	cs27.00.s0746	cs27.00.s1046	cs27.00.s1246	cs27.00.s1546	cs27.00.v0046

Dr. Maisch

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Distributor:



Dr. Maisch HPLC GmbH
Beim Brückle 14
D-72119 Ammerbuch
T: +49 (0) 7073 50357
F: +49 (0) 7073 4216
www.dr-maisch.com
www.modcol.com
info@dr-maisch.com



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