

# Dr. Maisch GmbH Platinum™ Columns

Dr. Maisch



## For Challenging Separations

- Unique selectivity
- Better peak shapes with polar analytes
- More separation choices with dual-selectivity
- Excellent stability and reproducibility
- 1.5µm highthroughput media for speed and resolution, especially when combined with Rocket™ and Expedite™ hardware

### The Platinum™ Column Advantage

Controlled silica exposure is the difference that makes Platinum™ columns unique. Instead of thoroughly covering the silica with bonded phase to hide the silica, the exposure of the silica in Platinum™ columns is controlled to provide a dual mode separation with both polar and non-polar sites exposed to your samples. This extends polar selectivity well beyond what other reversed-phase columns offer and gives separations other columns cannot.

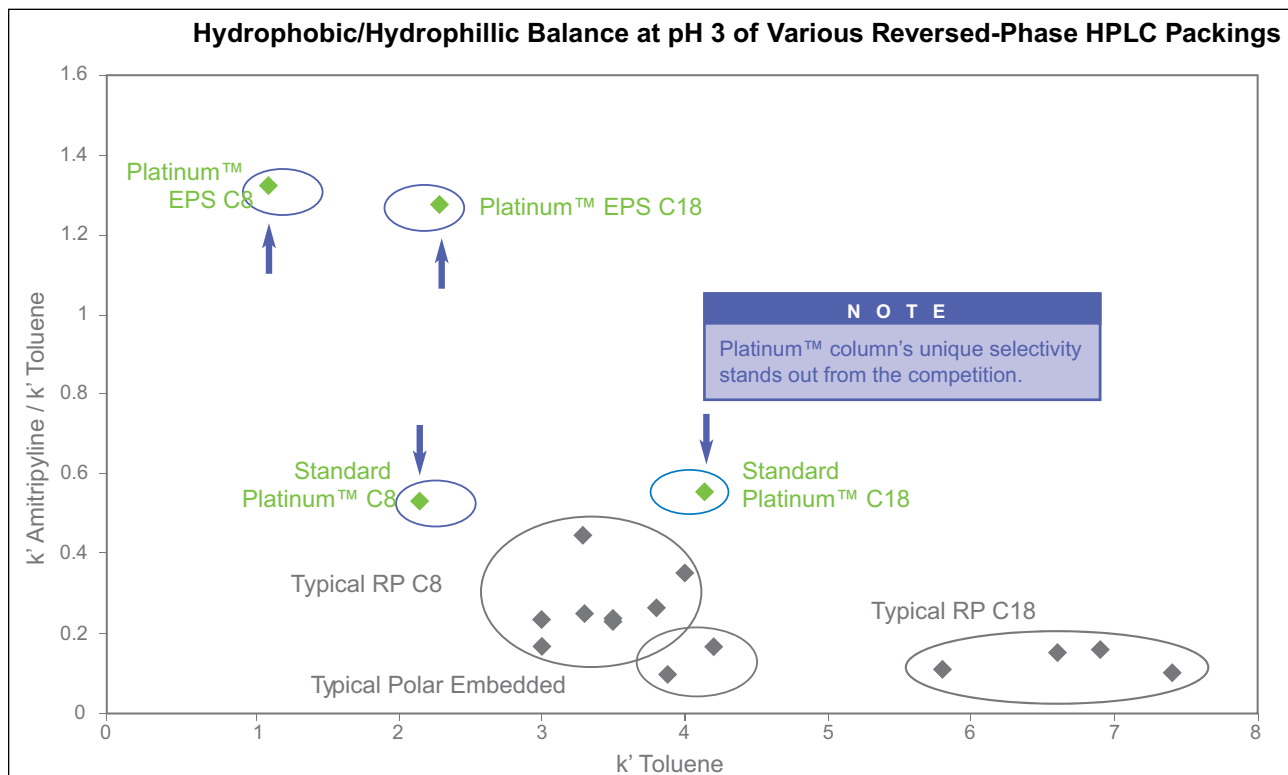
### Standard Platinum™ Columns vs Platinum™ EPS Columns

Platinum™ columns come in two varieties offering different levels of silica exposure. Standard Platinum™ has a moderate silica exposure and is best used with neutral and moderately polar compounds. Platinum™ EPS (Extended Polar Selectivity) has a high level of silica exposure and is best used with compounds containing more than two polar functional groups.

#### Alltech® Platinum™ Phase Specifications

Phase	Base Material	Particle Shape	Particle Size	Pore Size	Surface Area	Carbon Load	Phase Type	Endcapped?	USP L-code
C18	Silica	Spherical	1.5, 3, 5µm	100Å	200m²/g	6%	Monomeric	Yes	L1
EPS C18	Silica	Spherical	1.5, 3, 5µm	100Å	200m²/g	5%	Monomeric	No	L1
C8	Silica	Spherical	1.5, 3, 5µm	100Å	200m²/g	4%	Monomeric	Yes	L7
EPS C8	Silica	Spherical	3, 5µm	100Å	200m²/g	2.50%	Monomeric	No	L7
Phenyl	Silica	Spherical	3, 5µm	100Å	200m²/g	—	Monomeric	Yes	L11
Cyano	Silica	Spherical	3, 5µm	100Å	200m²/g	—	Monomeric	No	L10
Amino (NH₂)	Silica	Spherical	3, 5µm	100Å	200m²/g	—	Monomeric	No	L8
Silica	Silica	Spherical	3, 5µm	100Å	200m²/g	—	—	—	L3
SAX	Silica	Spherical	3, 5µm*	100Å	200m²/g	—	Monomeric	No	—

Trying to solve difficult separation problems using typical reversed-phase columns often leads to the same result. Choose Platinum™ columns for completely different selectivity. See chart below.

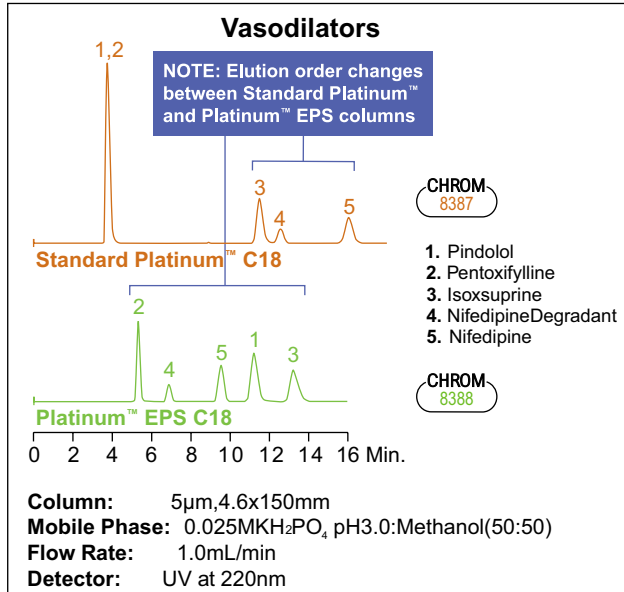


Plotting  $k'$  values of different compounds (polar vs. nonpolar) demonstrate the unique selectivity of Platinum™ and Platinum™ EPS columns, compared to conventional reversed-phase columns.



### Reverse Elution Order with Standard Platinum™ and Platinum™ EPS Columns

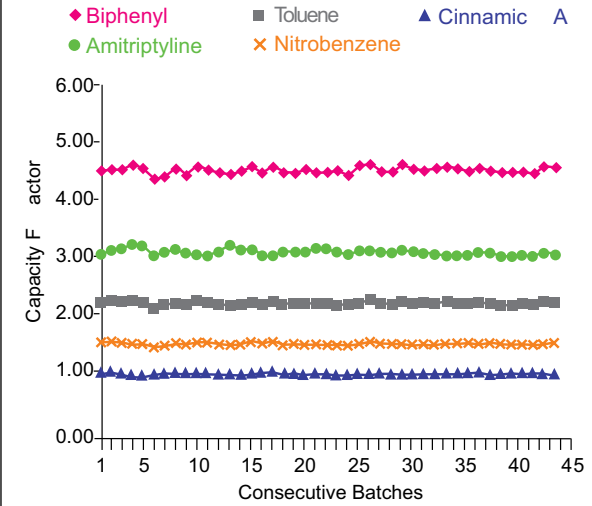
Often, it's preferable when minor components elute before, rather than after, closely retained major components.



### Platinum™ EPS Columns Have High Polar Compound Capacity

This is important for early eluting polar compounds which are often unresolved on conventional reversed-phase columns.

#### Capacity Factors for Platinum™ EPS C18



hplc columns | small molecule

#### Platinum™ HPLC Columns

Packing	Format	i.d. x Length	Standard Part No.	Waters® Fittings Part No.
C18, 1.5µm	Rocket™	7.0 x 33mm	50527	—
	Rocket™	7.0 x 53mm	50529	—
C18, 3µm	Solvent Reducer	3.0 x 150mm	32794	—
	Analytical	4.6 x 100mm	32007	32009
	Analytical	4.6 x 150mm	32020	32029
	Rocket™	7.0 x 33mm	50525	—
	Rocket™	7.0 x 53mm	50523	—
C18, 5µm	Solvent Reducer	3.0 x 150mm	32793	—
	Solvent Reducer	3.0 x 250mm	32792	—
	Analytical	4.6 x 150mm	32043	32044
	Analytical	4.6 x 250mm	32064	32068
EPS C18, 1.5µm	Rocket™	7.0 x 33mm	50577	—
	Rocket™	7.0 x 53mm	50579	—
EPS C18, 3µm*	Capillary	0.150x 50mm	22300	—
	Capillary	0.150x100mm	22430	—
	Capillary	0.150x150mm	22431	—
	Capillary	0.300x 50mm	22432	—
	Capillary	0.300x100mm	22433	—
	Capillary	0.300x150mm	22434	—
	Solvent Reducer	3.0 x 150mm	32799	—
	Analytical	4.6 x 100mm	32158	32161
	Analytical	4.6 x 150mm	32183	32184
	Rocket™	7.0 x 33mm	50575	—
	Rocket™	7.0 x 53mm	50573	—
EPS C18, 5µm	Solvent Reducer	3.0 x 150mm	32806	—
	Solvent Reducer	3.0 x 250mm	32802	—
	Analytical	4.6 x 150mm	32214	32216
C8, 1.5µm	Analytical	4.6 x 250mm	32246	32247
	Rocket™	7.0 x 53mm	50529	—
C8, 3µm	Rocket™	7.0 x 33mm	50532	—
C8, 5µm	Analytical	4.6 x 150mm	32370	32371
	Analytical	4.6 x 250mm	32375	32376
EPS C8, 3µm	Analytical	4.6 x 150mm	32415	32416
	Rocket™	7.0 x 33mm	50583	—
	Rocket™	7.0 x 53mm	50585	—
EPS C8, 5µm	Analytical	4.6 x 150mm	32420	32421
	Analytical	4.6 x 250mm	32425	32426

\*1.5µm and 5µm particles and other dimensions are available.

#### Platinum™ HPLC Columns (continued)

Packing	Format	i.d. x Length	Standard Part No.	Waters® Fittings Part No.
Phenyl, 3µm	Analytical	4.6 x 150mm	32631	32632
Phenyl, 5µm	Analytical	4.6 x 150mm	32636	32637
	Analytical	4.6 x 250mm	32641	32642
Cyano, 3µm	Rocket™	7.0 x 33mm	50593	—
	Rocket™	7.0 x 53mm	50595	—
Cyano, 5µm	Analytical	4.6 x 150mm	32672	32675
	Analytical	4.6 x 250mm	32681	32682
Amino, 3µm	Analytical	4.6 x 150mm	32706	32707
	Rocket™	7.0 x 53mm	50545	—
Amino, 5µm	Analytical	4.6 x 150mm	32713	32714
	Analytical	4.6 x 250mm	32722	32723
	Analytical	4.6 x 150mm	32535	32536
Silica, 3µm	Analytical	4.6 x 150mm	32542	32543
SAX, 3µm	Analytical	4.6 x 150mm	32952	32953
	Analytical	4.6 x 150mm	32944	32946
SAX, 5µm	Analytical	4.6 x 150mm	32943	32945

#### Platinum™ Guard Cartridges

Packing	i.d. x Length	Qty.	Part No.
C18 All-Guard™, 5µm*	3.0 x 7.5mm	3	99115
	4.6 x 7.5mm	3	32606
EPS C18, 3µm	0.150 x 10mm	—	22693
Capillary Guard**	0.300 x 10mm	—	22694
EPS C18 All-Guard™, 5µm*	3.0 x 7.5mm	3	99117
	4.6 x 7.5mm	3	32607
C8 All-Guard™, 5µm*	4.6 x 7.5mm	3	32612
EPS C8 All-Guard™, 5µm*	4.6 x 7.5mm	3	32614
Phenyl All-Guard™, 5µm*	4.6 x 7.5mm	3	32619
Cyano All-Guard™, 5µm*	4.6 x 7.5mm	3	32620
Amino All-Guard™, 5µm*	4.6 x 7.5mm	3	32621
Silica All-Guard™, 5µm*	4.6 x 7.5mm	3	32622
SAX All-Guard™, 5µm*	4.6 x 7.5mm	3	32787
All-Guard™ Cartridge Holder		ea	80101
<i>(Includes Direct-Connect Column Coupler)</i>			
<i>Capillary Guard Cartridge Holder</i>			
Guard Holder for 0.100mm and 0.150mm Guards		ea	GR-3710E
Guard Holder for 0.300mm and 0.500mm Guards		ea	GR-3710A

\*All-Guard™ holder required.

\*\*1.5µm and 5µm particles and other dimensions are available.