

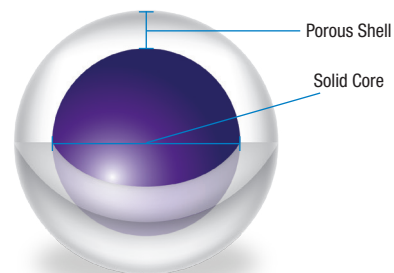
Kinetex Core-Shell Technology

HPLC/UHPLC Columns






Kinetex Core-Shell Technology delivers dramatic improvements in efficiency over conventional fully porous media which can be leveraged to increase resolution, greatly improve productivity, reduce solvent consumption, and decrease costs.

Whether you are running HPLC or UHPLC methods, the Kinetex core-shell family can deliver shockingly improved performance over the current column you are using.

- Obtain higher throughput without sacrificing resolution
- Easy method transfer across LC system platforms
- Reduce solvent consumption with faster analysis
- Reach lower levels of detection and quantitation



Complete Scalable Solution from UHPLC to HPLC to PREP LC

	UHPLC	HPLC	PREP	
	■			Incredible UHPLC efficiency and performance gains
	■			20 % higher efficiency than fully porous 1.7 µm columns
	■	■		Achieve sub-2 µm performance on HPLC and UHPLC systems
		■		Instantly improve your pharmacopoeia (Ph. Eur. & USP) monographs that require 3.5 µm particle size
		■	■	3 µm or better efficiencies at 5 µm pressures for HPLC and PREP LC methods

Expand Your Core-Shell Selectivity Toolbox



Kinetex core-shell particle LC columns provide unparalleled performance gains on ANY LC system! Plus, you have your pick of 11 amazing stationary phases and 5 versatile particle sizes.

Kinetex PS C18	Kinetex Polar C18	Kinetex EVO C18	Kinetex XB-C18	Kinetex C18	Kinetex C8
A multi-modal, 100 % aqueous C18 column with a positive surface modification that demonstrates unique selectivity and improved peak shape for basic compounds	Combined C18 and polar modified surface that provides polar and non-polar retention alongside 100 % aqueous stability	Novel pH 1-12 stable C18 that delivers robust methods and improved peak shape for bases	This unique C18 phase yields increased hydrogen bonding with hydrophobic selectivity, resulting in improved peak shape for basic compounds and increased retention of acidic compounds	Balanced C18 phase that provides the highest degree of hydrophobic selectivity relative to the other Kinetex phases	Moderate hydrophobic and steric selectivity is offered, bringing ultra-high performance to USP L7 and other octyl silane methods

Kinetex Biphenyl	Kinetex Phenyl-Hexyl	Kinetex F5	Kinetex HILIC	Kinetex PAH
100 % aqueous stable reversed phase chemistry with hydrophobic, aromatic, and enhanced polar selectivity	Aromatic and moderate hydrophobic selectivity results in the great retention and separation of aromatic hydrocarbons	Highly reproducible pentafluorophenylpropyl phase, exceptional for halogenated, conjugated, isomeric, or highly polar compounds	Used under HILIC running conditions, this phase provides the highest polar selectivity for retention and separation of hydrophilic compounds	Polymerically bonded C18 phase specifically developed for the separation of EU and EPA priority PAHs

Material Characteristics

Packing Material	pH Stability	Particle Sizes (µm)	Pore Size (Å)	Effective Surface Area (m ² /g)	Effective Carbon Load (%)	USP Classification	Pressure Stability (bar)
Polar C18	1.5-8.5*	2.6	100	200	9	L1	1000/600*
PS C18	1.5-8.5*	2.6	100	200	9	L1	1000/600*
EVO C18	1-12	5, 2.6, 1.7	100	200	11	L1	1000/600*
C18	1.5-8.5**	5, 2.6, 1.7, 1.3	100	200	12	L1	1000/600*
XB-C18	1.5-8.5**	5, 3.5, 2.6, 1.7	100	200	10	L1	1000/600*
C8	1.5-8.5**	5, 2.6, 1.7	100	200	8	L7	1000/600*
Biphenyl	1.5-8.5**	5, 2.6, 1.7	100	200	11	L11	1000/600*
Phenyl-Hexyl	1.5-8.5**	5, 2.6, 1.7	100	200	11	L11	1000/600*
F5	1.5-8.5**	5, 2.6, 1.7	100	200	9	L43	1000/600*
HILIC	2.0-7.5	5, 2.6, 1.7	100	200	0	L3	1000/600*
PAH	1.5-8.5*	3.5	100	200	12	L118	1000/600*

**Columns are pH stable from 1.5-10 under isocratic conditions. Columns are pH stable 1.5-8.5 under gradient conditions.

*2.1 mm ID Kinetex columns are pressure stable up to 1000 bar. 3.0 mm and 4.6 mm ID Kinetex 2.6 µm columns are stable up to 600 bar. When using Kinetex 1.3 µm or 1.7 µm, increased performance can be achieved, however high pressure-capable instrumentation is required.

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