

Zeochem Chromatographic Silica Selection Guide

Typical Applications	Silica morphology	Pore size (A)	MW (D)	Particle size (um)	Separation efficiency
<ul style="list-style-type: none"> • API • Intermediates • Small Molecules • Natural Products • Food • Flavors • Fragrances • Lipids/oils/fats 	Irregular (ZEOprep)	60	<500	25-40	↑
		90	<10,000	35 - 70	
<ul style="list-style-type: none"> • Carbohydrates • Pigments • Cosmetics 	Spheroidal (ZEObeads)	50	300-800	20 - 30	
		100	7,000		
<ul style="list-style-type: none"> • Biomolecules • Peptides • Insulin Analogues • Oligonucleotides • Proteins • Heavy metal scavengers 	Spherical (ZEOsphere)	120		10	↑
		300	<30,000		

Surface Modification / functionality

Aqueous	Non Aqueous	Retention of polar analytes
C4	SiO2	↑
Phenyl	Diol*	
C8	NH2*	
C18	NH2P	
	SAX	

Thiol (SH) & NH2 phases available for scavenging electrophiles and toxic heavy metals

- Can be used in both NP & RP systems

Please note; the optimal chromatographic material is specific to each analyte and chromatographic system. The above information is based on general chromatographic principles and is intended to be used as a guide only. Some limitations apply to the above listed grades/functional groups.