



HICHROM

Chromatography Columns and Supplies

LC COLUMNS
LiChroprep

Catalogue 9

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LiChrorep®

- Irregular preparative silica
- Three particle size ranges
- Guaranteed reproducibility from analytical (LiChrosorb and LiChrospher) to preparative phases
- Competitive price

LiChrorep® is a proven, highly successful packing material providing fast, effective and reproducible separations in HPLC and medium pressure chromatography. Merck offer three different particle size ranges of LiChrorep silica, available as a base silica or C18 bonded phase. The smaller particle size range, 15-25µm, is the most suitable for HPLC. LiChrorep RP-8, amino-, cyano- and diol-bonded phases are available in larger particle size materials.

Preparative Scale-Up

Figure 1A shows an analytical scouting separation of a prostaglandin sample performed at 1.5ml/min on a 10µm 250 x 4mm LiChrosorb Si60 column. A scaled-up separation of the same prostaglandin sample (Figure 1B), but with higher loading, was performed at 2.0litre/min on a 600 x 200mm LiChrorep Si60 column packed with 25-40µm particles. In this example, four different fractionation zones were identified from which the prostaglandin purity was identified.

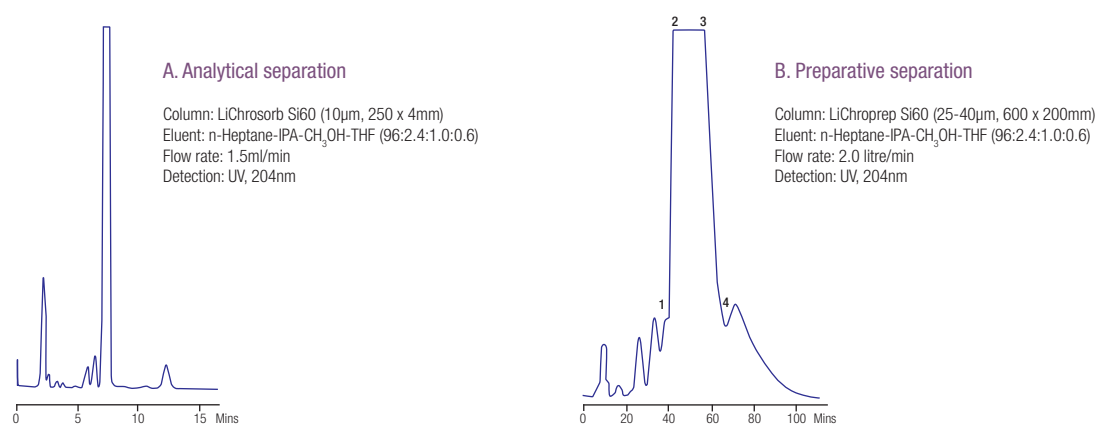
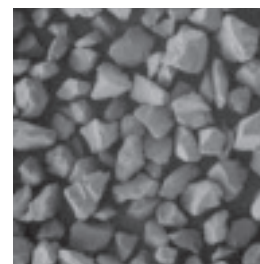


Figure 1. Example of preparative scale-up

LiChrorep RP-18 Phase

Particle Size Range (µm)	15-25	25-40	40-63
Mean Particle Size (µm)	22	32	54
Minimum Theoretical Plates (plates/m) ¹	10,000	5,500	1500
Typical Column Back Pressure (psi) ¹	150	90	75
Surface Area (m ² /g)		320	
Pore Size (Å)		100	
Carbon Load (%)		17-19	

¹ 250 x 4 mm, CH₃CN-H₂O (75:25) @ 1ml/min.



Ordering Information

LiChrorep Phase	Particle Size (µm)	Bulk Material ¹			
		100g	250g	500g	1kg
Si 60	15-25	-	-	-	09336.1000 £283
	25-40	-	-	-	09390.1000 £293
	40-63	-	13905.0250 £77	-	13905.1000 £280
RP-18	15-25	-	-	13901.0500 £1,960	-
	25-40	09303.0100 £441	-	09303.0500 £1,590	-
	40-63	-	13900.0250 £870	-	13900.1000 £2,900
RP-8	40-63	-	09362.0250 £799	-	09362.1000 £2,900
DIOL	40-63	-	13973.0250 £838	-	-
NH2	40-63	-	13974.0250 £848	-	13974.1000 POA
CN	40-63	-	13959.0250 £1,210	-	-

¹ Larger pack sizes also available