



HICHROM

Chromatography Columns and Supplies

LC COLUMNS
Princeton SFC and
HPLC

Catalogue 9

Hichrom Limited

1 The Markham Centre, Station Road
Theale, Reading, Berks, RG7 4PE, UK

Tel: +44 (0)118 930 3660 Fax: +44 (0)118 932 3484

Email: sales@hichrom.co.uk www.hichrom.co.uk

PRINCETON

Princeton Chromatography, Inc., New Jersey manufactures both HPLC and SFC columns.

PrincetonSFC Columns

Supercritical Fluid Chromatography (SFC) applications typically require polar stationary phases such as silica, amino and diol. Although these phases are adequate for many applications, there is still a need for additional polar phases to meet the demands of difficult separations.

Princeton Chromatography has developed a series of amide, urea and pyridine phases that enhance the capability of the SFC technique. Princeton Chromatography was the first company to develop and market the 2-Ethylpyridine phase which was launched in 2001. PrincetonSFC 2-Ethylpyridine is the column of choice for achiral SFC analysis of basic compounds. This phase requires no addition of amines to the eluent, producing excellent peak shape and reproducibility.

PrincetonSFC analytical columns are available with lengths of 50 to 250mm and i.d.s of 2.0, 3.0, 4.0 or 4.6mm. PrincetonSFC semi-preparative and preparative columns are available in i.d.s up to 50mm and larger. All PrincetonSFC columns are individually quality assured by SFC.

SFC Phases

Phase	Pore Size (Å)	Particle Size (µm)	Ordering Information (5µm phase)	
			250 x 4.6mm ¹	250 x 21.2mm ¹
2-Ethylpyridine	60	3, 5, 10	250046-01577	250212-01577
	100	3, 5, 10	250046-03577	250212-03577
Silica	60	3, 5, 10	250046-01510	250212-01510
	100	3, 5, 10	250046-03510	250212-03510
Cyano	60	3, 5, 10	250046-01507	250212-01507
	100	3, 5, 10	250046-03507	250212-03507
DIOL	60	3, 5, 10	250046-01509	250212-01509
	100	3, 5, 10	250046-03509	250212-03509
Amino	60	3, 5, 10	250046-01508	250212-01508
	100	3, 5, 10	250046-03508	250212-03508
Diethylamino	60	3, 5, 10	250046-01575	250212-01575
	100	3, 5, 10	250046-03575	250212-03575
DIOL-HL	60	5, 10	250046-01579	250212-01579
	100	3, 5, 10	250046-03579	250212-03579
2CN:DIOL	60	3, 5, 10	250046-01586	250212-01586
	100	3, 5, 10	250046-03586	250212-03586
Benzamide	60	3, 5, 10	250046-03576	250212-03576
	100	3, 5, 10	250046-03576	250212-03576
PA (Propylacetamide)	60	3, 5, 10	250046-01580	250212-01580
	100	3, 5, 10	250046-03580	250212-03580
PPU (Propylpyridylurea)	60	3, 5, 10	250046-03582	250212-03582
	100	3, 5, 10	250046-03582	250212-03582
DNP (Dinitrophenyl)	60	3, 5, 10	250046-03593	250212-03593
	100	3, 5, 10	250046-03593	250212-03593
Pyridine Amide	60	3, 5, 10	250046-01583	250212-01583
	100	3, 5, 10	250046-03583	250212-03583
4-Ethylpyridine	60	3, 5, 10	250046-01590	250212-01590
	100	3, 5, 10	250046-03590	250212-03590
Methane Sulphonamide (MeSAm)	60	3, 5, 10	250046-01591	250212-01591
	100	3, 5, 10	250046-03591	250212-03591
Benzene Sulphonamide (BeSAm)	60	3, 5, 10	250046-03592	250212-03592
	100	3, 5, 10	250046-03592	250212-03592
HA-Pyridine	60	3, 5, 10	250046-01587	250212-01587
	100	3, 5, 10	250046-03587	250212-03587
HA-Dipyridyl	60	3, 5, 10	250046-03588	250212-03588
	100	3, 5, 10	250046-03588	250212-03588
HA-DEA (Diethylamino)	60	3, 5, 10	250046-01565	250212-01565
	100	3, 5, 10	250046-03565	250212-03565
HA-DHP (Dihydroxypropyl)	60	3, 5, 10	250046-03569	250212-03569
	100	3, 5, 10	250046-03569	250212-03569

¹ Other dimensions available – please enquire



PrincetonSFC Columns (continued)

Figures 1 and 2 show the SFC separation of β -blockers on PrincetonSFC Silica and a mixture of test compounds on PrincetonSFC 2-Ethylpyridine respectively.

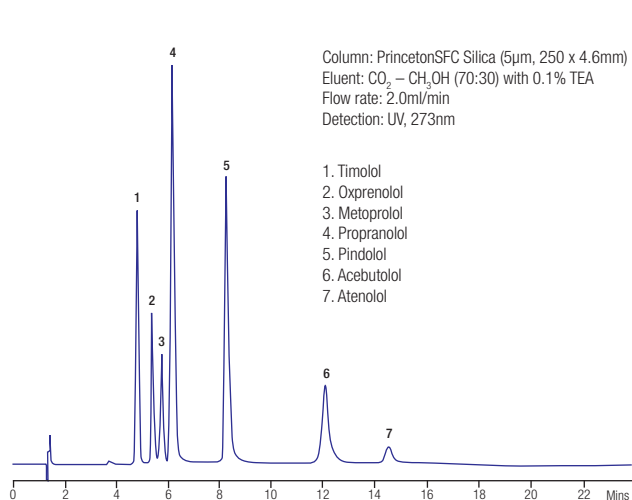


Figure 1. SFC separation of β -blockers

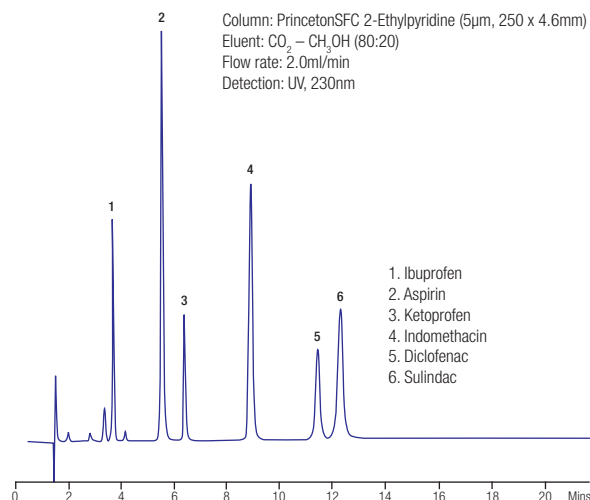


Figure 2. SFC of test compounds on 2-Ethylpyridine phase

PrincetonSFC Semi-Preparative and Preparative Columns

All Princeton semi-preparative and preparative SFC columns are packed using the same high quality bonded phases as the corresponding analytical columns, making scale-up from analytical dimensions seamless and easy. Princeton semi-preparative and preparative columns are available with i.d.s from 10mm to 50mm and in lengths from 50mm to 250mm. All columns are quality controlled by SFC and individual SFC documentation is included with each column. The ordering information for 250 x 21.2mm i.d. columns is given on page 202.

PrincetonSPHER HPLC Columns

Princeton Chromatography also manufactures a range of porous silica bonded HPLC columns. An overview of a selection of these phases is given below.

Series	Features
PrincetonSPHER-60	60Å pore size, high surface area (500m ² /g). Recommended for compounds with MW <1000Da C18, C8, C6, C4, Phenyl, CN, PFP, NH ₂ chemistries
PrincetonSPHER-100	100Å pore size, surface area 325m ² /g C18, C8, C4, Phenyl, CN, NH ₂ , PFP chemistries
PrincetonSPHER-300	300Å pore size, low surface area. Recommended for proteins and peptides C18, C8, C4, Phenyl, CN chemistries
PrincetonSPHER-ULTIMA	100Å pore size. Employs amide polar embedded functionality C18, C8, Phenyl, CN chemistries
PrincetonSPHER-Omni	100Å pore size. Endcapped with proprietary endcapping reagent which imparts stability at low pH C18 phase
PrincetonSPHER-HTS	60Å pore size, surface area 400m ² /g C12 bonded phase
PrincetonSPHER-C27	100Å pore size. Branched chain hydrocarbon ligand
PrincetonSPHER-C30	200Å pore size. Distribution of long chain hydrocarbons, average length C30

Please enquire for ordering information for any PrincetonSPHER HPLC column.