



HICHROM

Chromatography Columns and Supplies

LC COLUMNS
Princeton SFC and
HPLC

Catalogue 9

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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	£435	250212-01577	£2,375
	100	3, 5, 10	250046-03577	£435	250212-03577	£2,375
Silica	60	3, 5, 10	250046-01510	£388	250212-01510	£2,144
	100	3, 5, 10	250046-03510	£388	250212-03510	£2,144
Cyano	60	3, 5, 10	250046-01507	£388	250212-01507	£2,144
	100	3, 5, 10	250046-03507	£388	250212-03507	£2,144
DIOL	60	3, 5, 10	250046-01509	£388	250212-01509	£2,144
	100	3, 5, 10	250046-03509	£388	250212-03509	£2,144
Amino	60	3, 5, 10	250046-01508	£388	250212-01508	£2,144
	100	3, 5, 10	250046-03508	£388	250212-03508	£2,144
Diethylamino	60	3, 5, 10	250046-01575	£435	250212-01575	£2,375
DIOL-HL	60	5, 10	250046-01579	£388	250212-01579	£2,144
2CN:DIOL	60	3, 5, 10	250046-01586	£435	250212-01586	£2,375
	100	3, 5, 10	250046-03586	£435	250212-03586	£2,375
Benzamide	100	3, 5, 10	250046-03576	£435	250212-03576	£2,375
PA (Propylacetamide)	60	3, 5, 10	250046-01580	£435	250212-01580	£2,375
PPU (Propylpyridylurea)	100	3, 5, 10	250046-03582	£435	250212-03582	£2,375
DNP (Dinitrophenyl)	100	3, 5, 10	250046-03593	£435	250212-03593	£2,375
Pyridine Amide	60	3, 5, 10	250046-01583	£435	250212-01583	£2,375
4-Ethylpyridine	60	3, 5, 10	250046-01590	£435	250212-01590	£2,375
Methane Sulphonamide (MeSAm)	60	3, 5, 10	250046-01591	£435	250212-01591	£2,375
Benzene Sulphonamide (BeSAm)	100	3, 5, 10	250046-03592	£435	250212-03592	£2,375
HA-Pyridine	60	3, 5, 10	250046-01587	£472	250212-01587	£2,625
HA-Dipyridyl	100	3, 5, 10	250046-03588	£520	250212-03588	£2,851
HA-DEA (Diethylamino)	60	3, 5, 10	250046-01565	£472	250212-01565	£2,625
HA-DHP (Dihydroxypropyl)	100	3, 5, 10	250046-03569	£472	250212-03569	£2,625

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.

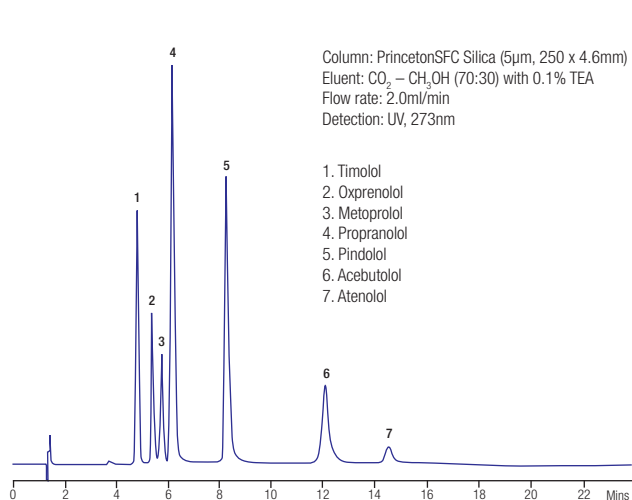


Figure 1. SFC separation of β -blockers

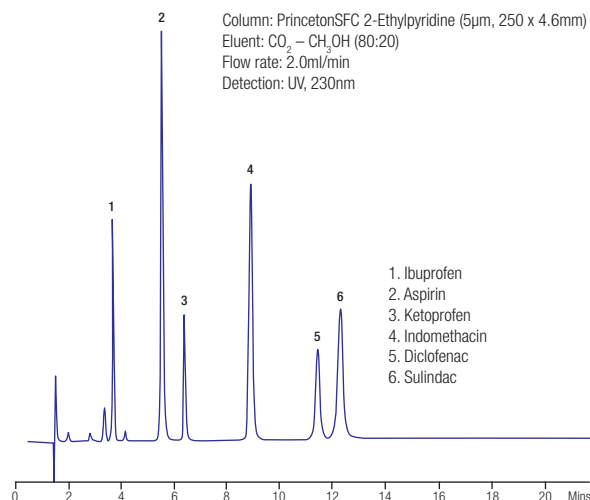


Figure 2. SFC of test compounds on 2-Ethylpyridine phase

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.