

DISCOVERY[®]

HPLC and SPE Products for Pharmaceutical Analysis and Purification

INTRODUCING

Discovery Cyano HPLC Columns

- low hydrophobicity, for rapid elution of hydrophobic molecules
- retention and separation of strongly basic analytes, including quaternary ammonium salts, with excellent peak shapes
- compatibility with highly aqueous mobile phases
- exceptional stability and column lifetime, from pH 2 to pH 8
- excellent reproducibility

HERE'S THE PROOF

Discovery Cyano Properties

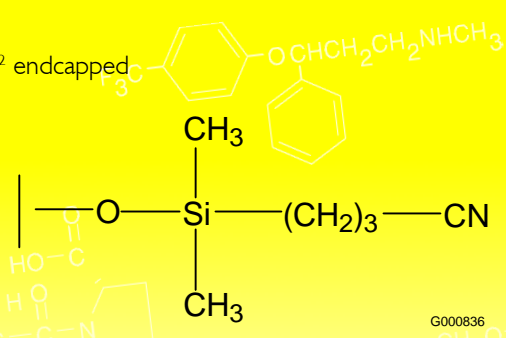
Silica:

particles: 5µm spherical
 surface area: 200m²/g
 pH range: 2 - 8.0

pore size: 180Å
 pore volume: 1mL/g
 metals (ppm): Fe <20
 Na/Ca <5
 Mg/K/Al/Ti <1

Bonded Phase

>4.5%C, 3.5µmole/m² endcapped

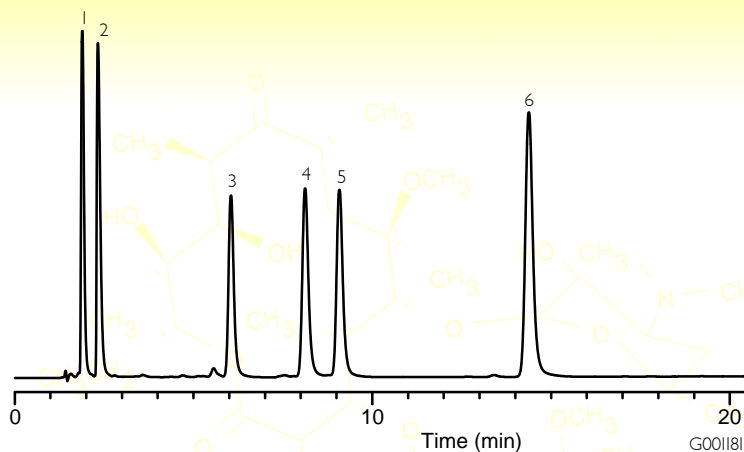


β-Lactam Antibiotics

Discovery Cyano column,
 15cm x 4.6mm, 5µm particles
 1.5mL/min
 A: 0.01% TFA in water
 B: 0.01% TFA in MeCN
 Gradient

Min	%B
0	5
20	25

1. Amoxicillin
2. Ampicillin
3. Piperacillin
4. Penicillin G
5. Penicillin V
6. Cloxacillin



SUPELCO

Supelco Park,
 Bellefonte, PA 16823-0048

phone:
 800-247-6628 / 814-359-3441

fax:
 800-447-3044 / 814-359-3044

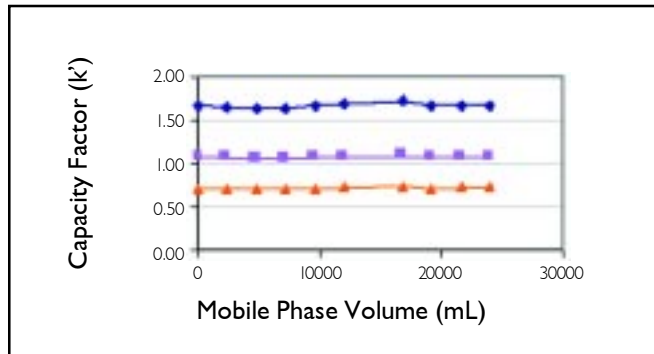
internet:
www.sigma-aldrich.com

email:
supelco@sial.com

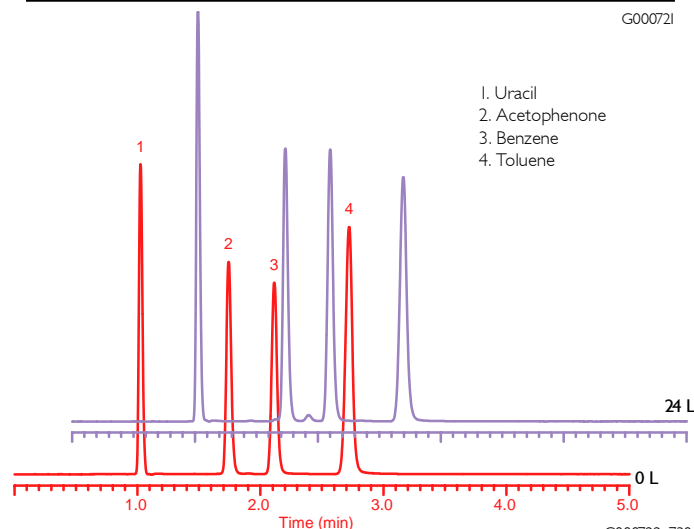
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Stability of Discovery Cyano at pH 1.6

15cm x 4.6mm, MeCN:H₂O + 0.2% TFA, pH 1.6
(25:75), 2mL/min, 35°C, 254nm



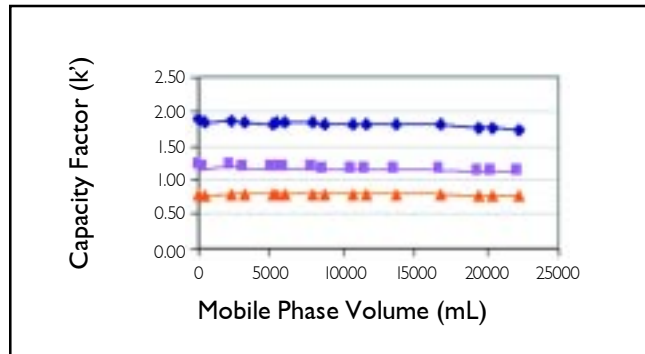
G000721



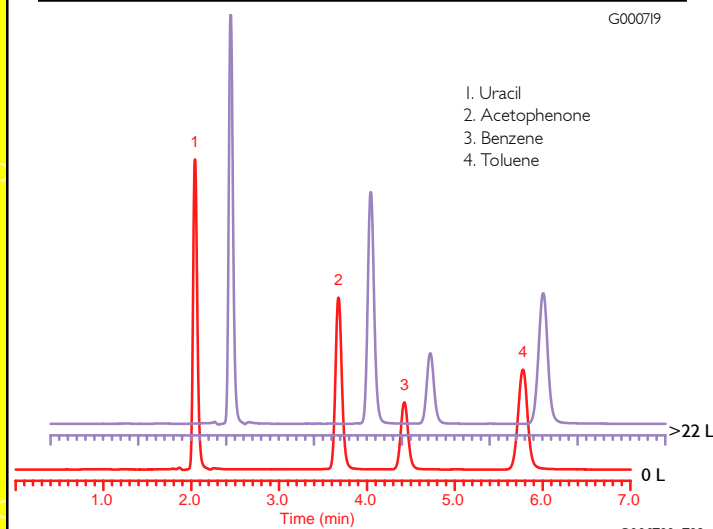
G000722, 730

Stability of Discovery Cyano at pH 7.0

15cm x 4.6mm, MeCN:25mM K₂HPO₄, pH 7.0
(25:75), 1mL/min, 35°C, 254nm



G000719



G000720, 729

ORDERING INFORMATION:

Discovery Cyano HPLC Columns

ID (mm)	LENGTH (cm)	CAT. NO.	ID (mm)	LENGTH (cm)	CAT. NO.
2.1	5	59355-U21	4.0	5	59355-U40
2.1	10	569521-U	4.0	10	569523-U
2.1	12.5	569524-U	4.0	12.5	569526-U
2.1	15	59356-U21	4.0	15	59356-U40
3.0	5	59355-U30	4.0	25	59357-U40
3.0	10	569522-U	4.6	5	59355-U
3.0	12.5	569525-U	4.6	10	569520-U
3.0	15	59356-U30	4.6	12.5	569527-U
3.0	25	59357-U30	4.6	15	59356-U
			4.6	25	59357-U

Discovery Cyano Special Application Kits

DESCRIPTION	CAT. NO.
DISCOVERY CYANO VALIDATION PACKS¹	
5cm x 2.1mm ID Columns	55715-U21
10cm x 2.1mm ID Columns	569806-U
15cm x 2.1mm ID Columns	55717-U21
5cm x 4.6mm ID Columns	55715-U
10cm x 4.6mm ID Columns	569807-U
15cm x 4.6mm ID Columns	55717-U
25cm x 4.6mm ID Columns	55719-U

¹ Identical columns made from three different bonded phase lots.

2cm Supelguard™ Cartridges with 5µm Discovery Packings

DESCRIPTION	CAT. NO.
4.0mm ID Cartridges²	
kit ³	59585-U
pk of 2	59586-U
3.0mm ID Cartridges	
kit ³	569570-U
pk of 2	569571-U
2.1mm ID Cartridges	
kit ³	59583-U
pk of 2	59584-U

² For 4.0mm ID and 4.6mm ID analytical columns.
³ Kits include one cartridge, a stand-alone holder, a piece of tubing, and 2 nuts and ferrules.

Additional sizes are available – please inquire.

Discover the benefits for yourself. Phone 800-247-6628 or 814-359-3441 for your column today!

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