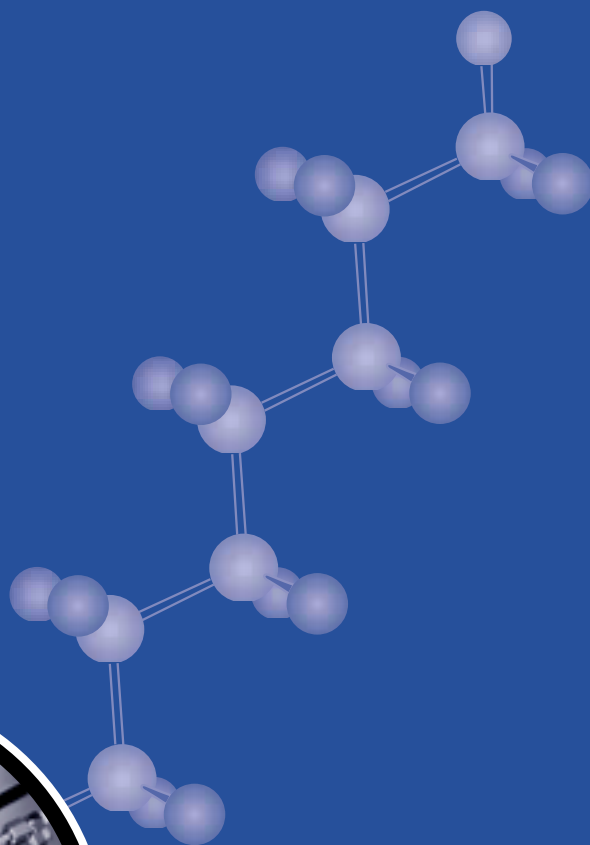
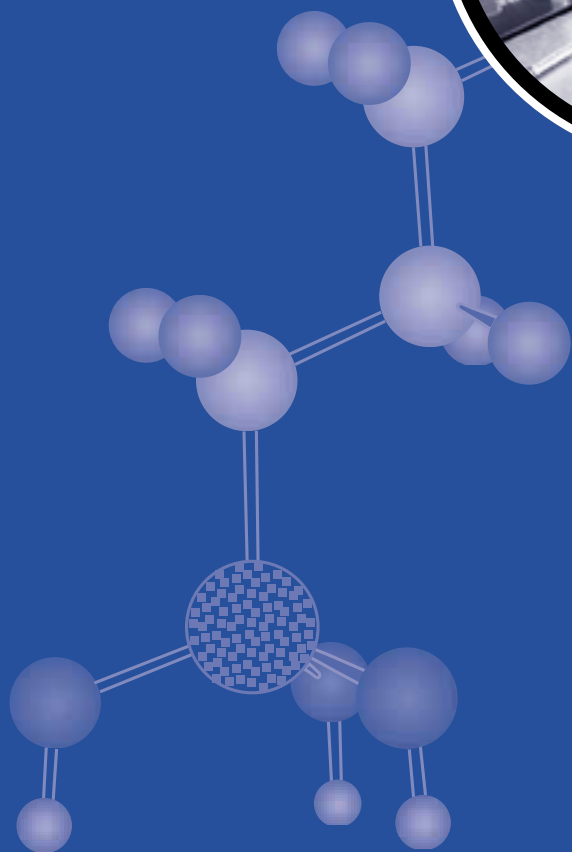


CONVENTIONAL HPLC COLUMNS



CONVENTIONAL HPLC COLUMNS

In an effort to bring ruggedness and reproducibility to liquid chromatography, Regis pioneered the first reversible flow HPLC column. The advent of reversibility brought forth a more uniform, efficient, highly reproducible, and dependable column with extended life. Today, Regis continues to manufacture reversible flow columns in a wide variety of bonded phases.

REXCHROM™ — Rugged and Reproducible

Regis applies its wealth of synthetic expertise in developing bonded stationary phases with superior chromatographic properties.

The REXCHROM stationary phases, with all parameters independently controlled and highly reproducible, satisfy our customers' demands for efficiency. Both 3 μm and 5 μm diameter particles have 200 m^2/g surface area, 100 \AA mean pore diameters and 0.5 cc/g pore volume.

The First Reversible Flow Column

Regis introduced the first truly reversible HPLC column in the early 1980s. Until that time, HPLC columns routinely carried specific flow direction indicators, and users were cautioned that flow in the opposite direction would destroy the column.

The ability to reverse flow direction is an important and distinctive feature of all Regis-manufactured columns. Routine reversal of flow direction leads to the following benefits, all of which can extend column life:

- **Cleaner outside frit surfaces**—reverse flow washes away dirt from the entrance frit
- **Deposit-free columns**—reverse flow, especially with pure solvents, dissolves and removes column deposits that may have built up near the column entrances
- **Fine-free inside frit surfaces**—periodic flow reversal holds fines near their point of origin rather than allowing them to accumulate at the exit frit.

All Regis columns are manufactured using an exclusive packing process resulting in an extensive line of high quality, highly reproducible HPLC columns available in a variety of column lengths, particle sizes, and bonded phases.

Quality Assurance

Regis manufactures its columns to the highest quality standards. Each column is packed and tested in accordance with specific control standards. Column performance reports along with care-and-use guides are included with each column.

For questions regarding applications, method development, or custom columns, contact Regis' Sales or Technical Service Department, or e-mail us at sales@registech.com.



REXCHROM REVERSIBLE COLUMN SERIES

REXCHROM Conventional Columns

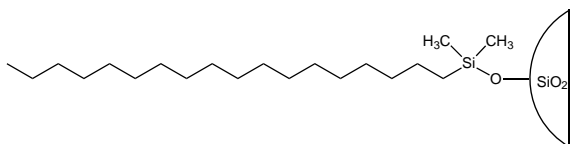
From its introduction as the first explicitly reversible HPLC column, the Regis REXCHROM Reversible has been the column of choice for efficiency, dependability, quality, and extended life. Each REXCHROM phase has a very uniform bonding chemistry. The specifications for the REXCHROM Column Series are detailed in the adjacent chart. These columns have demonstrated effective separations in a variety of applications.

Phase	Specifications Phase Loading, $\mu\text{mol}/\text{m}^2$		Endcapping
	5 μm	3 μm	
ODS (C18)	2.9 \pm 0.3	2.9 \pm 0.3	Trimethylsilyl
Octyl (C8)	3.2 \pm 0.3	3.2 \pm 0.3	Trimethylsilyl
Phenyl	3.2 \pm 0.3	3.2 \pm 0.3	Trimethylsilyl
SAX	2.3 \pm 0.5	2.3 \pm 0.5	None
SCX	2.8 \pm 0.5	2.8 \pm 0.5	None
Nitrile	3.5 \pm 0.3	3.5 \pm 0.3	Trimethylsilyl
Amino	3.1 \pm 0.3	3.1 \pm 0.3	None

ODS (C18)

REXCHROM ODS Columns

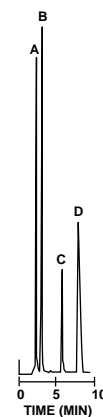
This highly retentive phase is useful for the resolution of nonpolar and moderately polar compounds. For samples that require additional retention, this phase can easily be used in ion pair chromatography. The fully endcapped REXCHROM ODS not only provides high chromatographic efficiency but also excellent sample recovery for many compounds.



Product	Particle Size	Column Length and i.d.	Product #	U.S. Price
ODS (Little Champ II)	3 μm , 100Å	5 cm x 4.6 mm i.d.	731421	
ODS	3 μm , 100Å	10 cm x 4.6 mm i.d.	727118	
ODS	5 μm , 100Å	15 cm x 4.6 mm i.d.	728118	
ODS	5 μm , 100Å	25 cm x 4.6 mm i.d.	728218	
ODS	5 μm , 100Å	25 cm x 10.0 mm i.d.	728418	

Separation of Penicillins

- Column:** REXCHROM ODS, 5 μm , 100Å
25 cm x 4.6 mm i.d.
- Mobile Phase:** (77/23) 0.02 M potassium phosphate buffer, pH 6.8/
acetonitrile
- Flow Rate:** 1.0 mL/min
- Load:** 10 μL
- Detection:** UV 254 nm
- Peak Identities:** A. Amoxicillin
B. Ampicillin
C. Benzyl Penicillin
D. Penicillin V



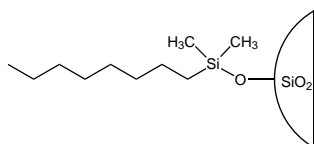
Product information and applications are available online at:
www.registech.com/hplc/.

REXCHROM REVERSIBLE COLUMN SERIES

Octyl (C8)

REXCHROM Octyl Columns

Similar to the highly popular ODS (C18) phase, this monomeric octyl stationary phase can easily resolve both low and moderately polar compounds without compromising column efficiency. Ideal for analyses that require rapid elution time, the fully endcapped octyl stationary phase is often used for herbicide, pharmaceutical, and amino acid applications.



Product	Particle Size	Column Length and i.d.	Product #	U.S. Price
Octyl	3 μm , 100 \AA	10 cm x 4.6 mm i.d.	727108	
Octyl	5 μm , 100 \AA	15 cm x 4.6 mm i.d.	728108	
Octyl	5 μm , 100 \AA	25 cm x 4.6 mm i.d.	728208	
Octyl	5 μm , 100 \AA	25 cm x 10.0 mm i.d.	728408	

Separation of Carboxylic Acids

Column: REXCHROM Octyl (C8), 5 μm , 100 \AA
25 cm x 4.6 mm i.d.

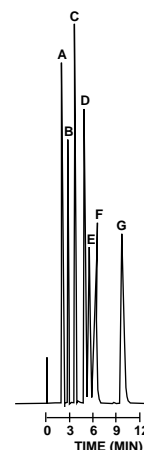
Mobile Phase: 0.1 M phosphoric acid

Flow Rate: 1.5 mL/min

Load: 10 μL

Detection: UV 200 nm

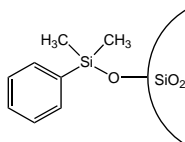
Peak Identities:
A. Tartaric acid
B. Malic acid
C. Acetic acid
D. Maleic acid
E. Citric acid
F. Succinic acid
G. Propionic acid



Phenyl

REXCHROM Phenyl Columns

The phenyl bonded phases provide π - π interaction between the stationary phase and the analyte. This interaction permits excellent resolution and selectivity for polar aromatic compounds, such as chlorophenol and nitroanilines.



Product	Particle Size	Column Length and i.d.	Product #	U.S. Price
Phenyl	3 μm , 100 \AA	10 cm x 4.6 mm i.d.	727107	
Phenyl	5 μm , 100 \AA	15 cm x 4.6 mm i.d.	728107	
Phenyl	5 μm , 100 \AA	25 cm x 4.6 mm i.d.	728207	
Phenyl	5 μm , 100 \AA	25 cm x 10.0 mm i.d.	728407	

Separation of Aromatics

Column: REXCHROM Phenyl, 5 μm , 100 \AA
25 cm x 4.6 mm i.d.

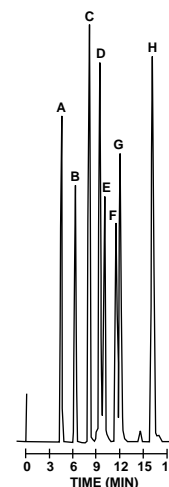
Mobile Phase: (73/27) acetonitrile/water

Flow Rate: 1.0 mL/min

Load: 10 μL

Detection: UV 254 nm

Peak Identities:
A. Benzene
B. Naphthalene
C. Biphenyl
D. Phenanthrene
E. Anthracene
F. Fluoranthrene
G. Pyrene
H. Chrysene



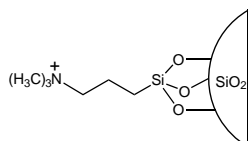
Product information and applications are available online at:
www.registech.com/hplc/.

REXCHROM REVERSIBLE COLUMN SERIES

SAX

REXCHROM SAX Columns

The quaternary ammonium functionality of this strong anion exchange (SAX) phase maintains a constant positive charge, thus allowing retention and separation of anionic analytes, such as oligonucleotides.



Product	Particle Size	Column Length and i.d.	Product #	U.S. Price
SAX	3 μm , 100 \AA	10 cm x 4.6 mm i.d.	727120	
SAX	5 μm , 100 \AA	15 cm x 4.6 mm i.d.	728120	
SAX	5 μm , 100 \AA	25 cm x 4.6 mm i.d.	728220	
SAX	5 μm , 100 \AA	25 cm x 10.0 mm i.d.	728420	

Separation of a Base Mixture

Column: REXCHROM SAX, 5 μm , 100 \AA
25 cm x 4.6 mm i.d.

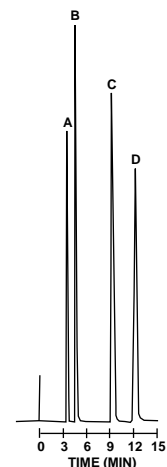
Mobile Phase: 0.05 M sodium dihydrogen phosphate buffer, pH 3.0

Flow Rate: 1.0 mL/min

Load: 10 μL

Detection: UV 254 nm

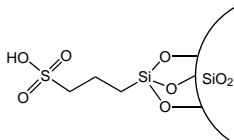
Peak Identities: A. Cytidine
B. Adenosine
C. Uridine
D. Guanosine



SCX

REXCHROM SCX Columns

The strong cation exchange (SCX) phase relies on the negatively charged sulfonic acid functionality for separation of catecholamines, prostaglandins, and amino acids.



Product	Particle Size	Column Length and i.d.	Product #	U.S. Price
SCX	3 μm , 100 \AA	10 cm x 4.6 mm i.d.	727130	
SCX	5 μm , 100 \AA	15 cm x 4.6 mm i.d.	728130	
SCX	5 μm , 100 \AA	25 cm x 4.6 mm i.d.	728230	
SCX	5 μm , 100 \AA	25 cm x 10.0 mm i.d.	728430	

Separation of a Nucleotide Mixture

Column: REXCHROM SCX, 5 μm , 100 \AA
25 cm x 4.6 mm i.d.

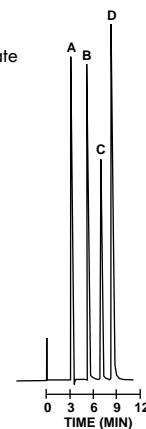
Mobile Phase: (95/5) 0.2 M ammonium dihydrogen phosphate buffer, pH 3.0/acetonitrile

Flow Rate: 1.0 mL/min

Load: 10 μL

Detection: UV 254 nm

Peak Identities: A. Uracil
B. Guanine
C. Cytosine
D. Adenine



Product information and applications are available online at:
www.registech.com/hplc/

