CHRODEX

LABORATORY

002-02 219 241 45
chrodex.com
info@chrodex.com
1 Gamal Ezz El-Deen str.
11843 El-Nozha, Cairo, Egypt.

CHRODEX
SCIENCE HAS NO LIMITS

Our customers are in the areas of:

- Agriculture
- Biotechnology Industries
- Clinical Research Organization
- Chemicals Industries
- Cleaning and maintenance products
- Electronics industry
- Environmental Labs
- Food Industries
- Hygiene and beauty articles
- Medicines and cosmetics
- Medical Institutions
- Pesticides Industries
- Pharmaceutical Colleges
- Pharmaceuticals - basic and auxiliary
- Petrochemical Industries
- Petroleum - heavy derivative
- Pharmaceutical Industries
- Research Centers & Universities
- Veterinary Industry

CHRODEX is a company with vast experience in the laboratory and industrial sector.The company was founded in Weilheim,
Upper Bavaria- Germany.
Our service include trade in laboratory consumables, medical and microbology products, laboratory instruments, chemicals, pharmaceutical equipment, industrial automtion, to the planning, establishment and equipment of complete laboratories and hospitals.

We serve our international customers with all the products of the world's major manufacturers at Chromatography and Analytics and industry needs

For continue questions and informations, we are looking forward to your contact.
Thank you

CHRODEX

Contact:

EGYPT OFFICE (Head Office)

CHRODEX

1 Gamal Ezz El-Deen str.
11843 El-Nozha,
Cairo, Egypt.
Tel. 00202 219 241 45
Fax.00202 219 241 46
info@chrodex.com
https://chrodex.com

GERMANY OFFICE

German Technology

Fischerried 4
82362 Weilheim
Germany.
Tel. +49(0)881 901 1092
Fax.+49(0)881 901 1093
info@getechnology.de

WE OFFER OUR CUSTOMERS ALL ANALYTICS NEEDS FROM LEADING MANUFACTURERS WORLDWIDE

AGILENT	AKZONOBEL	ABEL INDUSTRIES	ADVANTEC	A&D INSTRUMENT
ACE	ATAGO	BANDELIN	BÜCHI	BOCHEM
BINDER	BROOKFIELD	BRAND	BIO RAD	BECKMAN
CAMAG	CHROMTECH	CHROMACOL	DIONEX	DAICEL
DR.MAISCH	DURAN	DIA-NIELSEN	EPPENDORF	EDWARDS
ELMA	ERWEKA	FRITSCH	GFL	GL SCIENCES
GRACE	HI CHROM	HERAEUS	HALO	HANNA
HELLMA	HEIDOLPH	HAMILTON	HETTICH	ILMVAC
IKA	JULABO	JASCO	JENWAY	KNAUER

				
LA-PHA-PACK	LAUDA	MERCK	MILLIPORE	MARIENFELD
				
METROHM	METTELER TOLEDO	MEMMERT	MACHEREY-NAGEL	NALGENE
				
PERKIN ELMER	PHENOMENEX	PALL	PHARMA TEST	RETSCH
				
REGIS	RESTEK	RHEODYNE	STUART	SGE ANALYTICAL
				
SHIMADZU	SHISEIDO	SHODEX	SARTORIUS	SIGMA ALDRICH
				
SHINWA	SYSTEC	SYKAM	THERMO	TOSOH
				
VISTALAB	VACUUBRAND	VITLAB	VARIAN	VELP
				
WHATMAN	WTW	WATERS	YMC	ZIRCHROM

Agilent Technologies

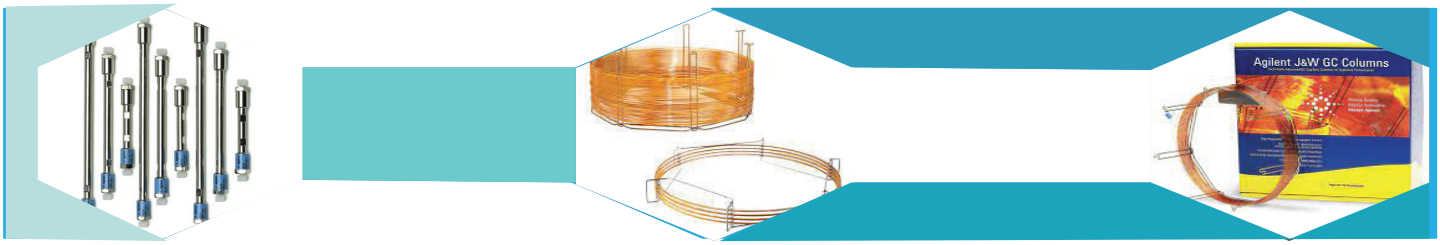
LC Columns Deliver Results for Complex Analytical Challenges

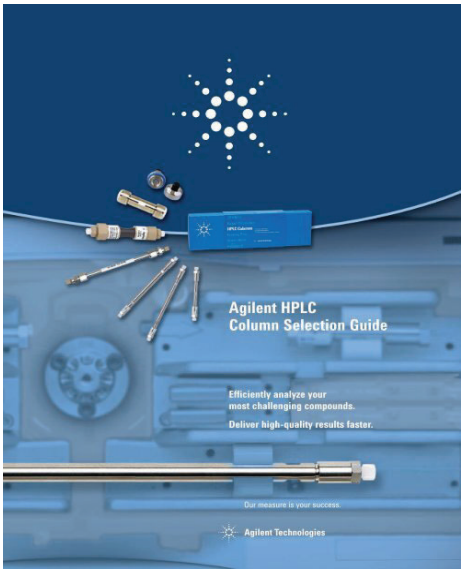
Agilent liquid chromatography (LC) columns deliver reliable, consistent performance in a wide range of analytical LC applications.

We offer LC, HPLC, UHPLC columns and UPLC columns for diverse applications ranging from small molecule separations to biomolecule separations, glycan mapping, protein analysis, and mAb analysis.

Our Poroshell columns lead the industry in selectivity and sensitivity.

We also offer a complete range of LC standards, cartridge column systems, and method development kits.





PrepHT Hardware	Rapid Resolution and RRHT Cartridge	ZORBAX SemiPreparative Guard Column Hardware
ZORBAX PrepHT guard catridges (17 x 7.5mm) work with the guard hardware kit and fit at the end of 21.2mm PrepHT cartridge columns.	Column System The Zorbax Rapid Resolution(3.5 m) and Rapid Resolution HT(1.8 m) Cartridge-Column System provides convenient.	The Zorbax Semi Preparative Guard Column Kit provides convenient costeffective protection for high performance lab-scale.

The Zorbax Rapid Resolution (3.5 µm) and Rapid Resolution HT (1.8 µm) Cartridge-Column System provides convenient, cost-effective, high speed liquid chromatographic analyses. The cartridge components assemble quickly and easily to provide a high-efficiency, low dead-volume column. The cartridge-column seals with hand tightening, using perfluoro-elastomer gaskets, at pressures up to 400 bar (6000 psi) and temperatures up to 80 ºC. The reusable cartridge end fittings adapt the cartridge-column for connection to standard 1/16 in LC fittings. Rapid Resolution and Rapid Resolution HT Cartridges are filled with high performance ZORBAX StableBond and Eclipse bonded phase packings to provide the highest quality separations possible in such short length columns.

GC Columns for Accurate, Reliable Performance Agilent's GC columns help lab analysts maintain the highest standards of performance. Agilent J&W capillary columns deliver industry-leading technology with the highest inertness, lowest bleed levels and tightest column-to-column reproducibility. Our low thermal mass GC columns deliver shorter analytical cycle times than air-bath oven techniques while using less power.

ACE
HPLC & UHPLC Columns

Advanced Chromatography Technologies:

ACE™ ultra-pure base deactivated silica

- Guaranteed Reproducibility
- LC/MS to Preparative Scale Dimensions
- Ultra Inert Base Deactivated HPLC Columns

ACE HPLC columns are designed to meet even the most challenging of chromatographic applications, giving excellent performance with acidic, basic and neutral molecules. A wide range of particle sizes, pore sizes, bonded chemistries and column dimensions are available. Ultra-high purity, ultra-inert ACE columns also provide unmatched reproducibility and excellent column life time.

As a general rule, retention increases with chain length of the bonded phase. We recommend starting most method development projects with C18 or C8, knowing that if more retention and hence more resolution is needed, starting with C8 offers the benefit of shorter analysis times and/or lower organic solvent use.

The elution order for most compounds will be the same on the aliphatic (C18, C8, C4) phases. If a differentelution order is required for compound verification or to resolve matrix components, changing to a phenyl or CN phase maybe far simpler than trying to change selectivity by mobile phase or temperature changes.

In many cases, the ACE CN and ACE Phenyl phases will offer a significant difference in selectivity from the aliphatic phases.

ACE Preparative HPLC Columns

- Ultra high purity base deactivated silica
- 5, 10 and 15m particle sizes avaiable
- Fully validated columns
- Exceptional reproducibility
- Excellent efficiencies
- High sample recovery
- Excellent column lifetime
- 100Å and 300Å pore sizes.

Capillary and Nano Columns

- Capillary (500m and 300m) an nano (100m and 75m) dimensions
- Wide range of bonded phase available
- 100Å and 300Å pore sizes
- High efficiency, long lifetime and guaranteed reproducibility
- LC/MS and LC/MS/MS appltions.

ACE LC/MS and Rapid Analysis Columns

- High performance excellent pea shape for higher sensitivity
- Choice of 13 low bleed phases for c plete optimization
- Ultra-inert silica enables MS compatible buffers to be used
- 20mm, 30mm, 35mm and 50mm column lengths
- 1.0, 2.1, 3.0, 4.0 and 4.6mm i.d.s.

Original Kromasil® HPLC-Columns

AkzoNobel Kromasil®

Kromasil™ by EKA CHEMICALS / Akzo Nobel
A spherical, totally porous silica-based media developed and optimised for:
resolution / loadability / chemical stability / mechanical stability. Kromasil Eternity is a platform with grafted organo-silane surface for chromatography with extended chemical
stability at any pH between pH 2 and pH 12. A natural choice for the separation of ionic or aromatic substances in various buffer compositions

Kromasil® 60 For NP-Chromatography
S IL (5 / 7 / 10 / 13 / 16 µm)
CN (5 / 10 / 16 µm)
DIOL (5 / 10 µm)

Kromasil® 100 Standard for all Applikations
S IL (3,5 / 5 / 7 / 10 / 13 / 16 µm)
C4 (3,5 / 5 / 7 / 10 / 13 / 16 µm)
C8 (3,5 / 5 / 7 / 10 / 13 / 16 µm)
C18 (3,5 / 5 / 7 / 10 / 13 / 16 µm)
PHENYL (5 / 10 / 16 µm

Kromasil® 300 for Analytik of Biopolymeren
S IL (5 / 10 / 16 µm)
C4 (5 / 10 / 16 µm)
C8 (5 / 10 / 16 µm)
C18 (5 / 10 / 16 µm)

Specialised on Bioseparations:
Aminex™-HPLC columns: packed with a polystyrene divinylbenzene ion exchange resin, separating compounds using the ionmoderated partition chromatography technique using simple isocratic mobile phases.

BIO-RAD

Carbohydrate analysis columns are ideal for the analysis of beet sugars, molasses, corn syrup, pentose sugars, cellulose hydrolysates, oligosaccharides, glucose, galactose, sucrose, and fructose. Organic acid and alcohol columns are ideal for the analysis of sugars with organic acids, alcohol, glycol, and fermentation monitoring.Applications kits for food analysis are ideal for the analysis of carbohydrates and organic acids. Micro-Guard cartridges extend column life by protecting Aminex columns from degradation caused by particulate matter, irreversibly bound material, and aggressive reagents in the sample or solvent. When resolution begins to degrade, simply replace the spent cartridge .

CHIRAL TECHNOLOGIES EUROPE

Daicel chiral columns offer excellent resolution of racemates, rapid and easy method development, plus durability and long service life.
Perhaps as important in today's development environment, our range of chiral columns, catalog of chiral stationary phases (CSPs), and proprietary application database offer a smooth, swift scale-up from discovery through development and pilot systems to commercial-scale production.

CHIRALPAK® and CHIRALCEL®
are well known as chiral chromatography columns. These products are trademarks of Daicel. Inside the chiral columns are chiral resolving agents Chiral Stationary Phases (CSPs).
Daicel commenced the development of these products in the 1980s using our expertise in cellulose chemistry.

CHIRALPAK® and CHIRALCEL®
are available not only as analytical columns and/or small-scale separation, but also for commercial separations. Simulated moving bed (SMB) is a continuous column separation which allows MT scale production. Currently the largest SMB chiral production in the world is >100MT.Recent product developments consist of immobilized CSP, CHIRALPAK® IA, IB, and IC.
These allow use of a wider range of chromatographic solvents.

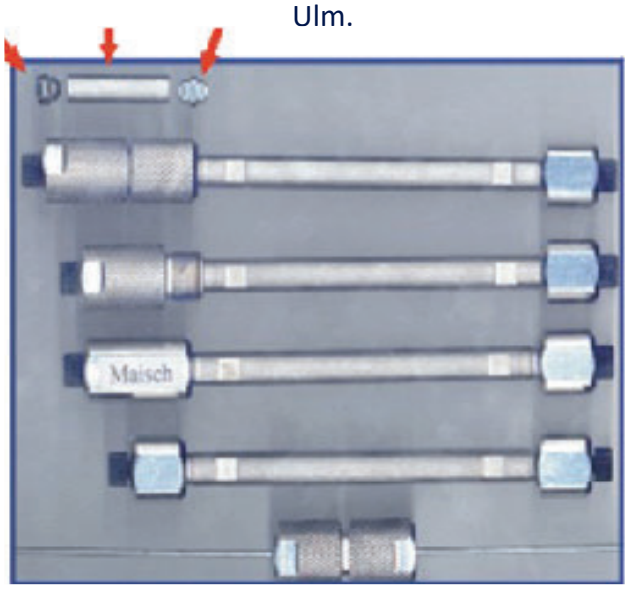
Dr. Maisch GmbH

Any Column, Any Size, Any Media

We provide our customers with Dr. Maisch HPLC Columns - Phases other Manufacturers with high competitive prices .

Chiral-AGP (CBH+HSA)	Chromtech-Ltd.
UBondapak	Waters
Capcell	Shiseido
Daicel	Daicel Chemicals Ind.
Eurospher	Knauer
ExSil	Exmere
Hypersil	Hypersil
Kromasil	Akzo Nobel
Lichrosorb	Merck
Lichrospher	Merck
Mikrosorb	Rainin
Nucleosil	Macherey & Nagel
Partisil	Whatman
Poros	Perseptive Biosystems
PRP	Hamilton

The owner Dr. Maisch has worked with HPLC for over 30 years, beginning in 1980 to isolate new insect hormones from butterflies with the, then very new technique of HPLC at the University of Ulm.



Dionex offers a wide variety of LC, IC, and Bio columns to meet any analytical application.

Chromatographic separations

require appropriate HPLC columns for the specific application. The Dionex Acclaim columns are available packed with reversed-phase, polar embedded phases, as well as specialty phases; and columns optimized for Rapid Separation Liquid Chromatography. Biological separations require unique packing material to achieve high resolution analysis of these compounds.

IC and RFIC Columns

Thermo Fisher Scientific offers a complete line of IC and RFIC™ columns for use with hydroxide, carbonate, and MSA eluents. The Thermo Scientific™ Dionex™ IonPac™ polymeric columns address a variety of chromatographic separation modes including ion exchange, ion exclusion, and reversed-phase ion pairing and ion suppression.

Bio Columns

Biological separations

often require unique chemistry to provide high resolution, high efficiency separations. Dionex offers a variety of columns for proteins, peptides, carbohydrates, nucleic acids, and more.

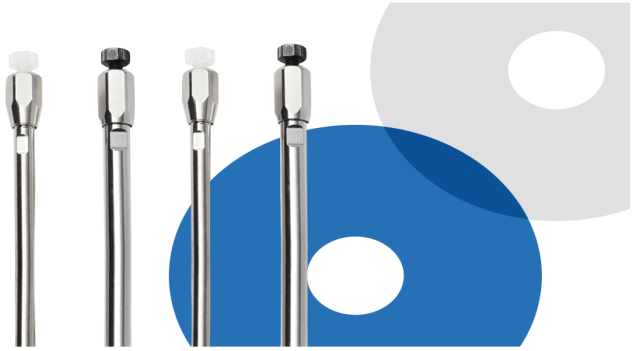
GRACE
Talent | Technology | Trust™

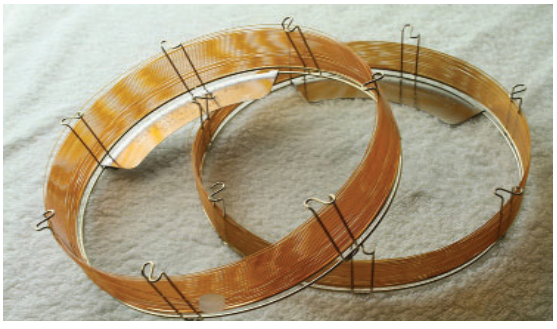
The Alltech Prevail family consists of reversed-phase and normal phase columns for use with 100% organic to 100% aqueous mobile phases, allowing separation of highly polar analytes in aqueous mobile phases and hydrophobic analytes in organic mobile phases. These columns are made with spherical silica, monomerically bonded and endcapped with a 110Å pore size. Specialty phases available are Carbohydrate ES and Organic Acid. They are available in LC/MS, Expedite®, Rocket®, Solvent Reducer, Analytical and Prep formats.The Alltech Alltima family are high quality general purpose columns. They are made with spherical silica, polymerically bonded and double endcapped for long lifetimes, with a 100Å pore size and a high carbon load. They show high resistance to harsh mobile phases and give sharp, symmetrical peaks even with strongly basic compounds. They are available in LC/MS, Expedite®, Rocket®, Solvent-Reducer, Analytical and Prep formats.

The Alltech Platinum Columns are designed to separate mixtures that a strongly hydrophobic phase cannot. They are silica based (100Å) and are available in Standard Platinum for neutral and moderately polar compounds and Platinum EPS (Extended Polar Selectivity) for compounds with multiple polar groups. They are available in Rocket®, Solvent-Reducer, Analytical and Prep formats.Vydac® 218TP reversed-phase columns are recommended for the separation of: Small polypeptides less than 4000–5000 MW / Enzymatic digest fragments / Natural and syntheticpeptides / Multi-ring compounds.

GL Sciences provides the analytical HPLC columns of capillary HPLC to all column dimensions. Well known are the pillars of the company Inertsil GL.
We supply you with the entire product spectrum of GL Sciences (spare parts, consumables, accessories).

GL Sciences





Reversed-Phase | Anion Exchange | Cation Exchange | Ion Exclusion

Reversed-Phase HPLC Columns Hamilton reversed-phase HPLC columns combine the best characteristics of silica-based and polymeric columns to arrive at a product that is highly inert and long-lasting. Hamilton offers four polymeric and two silica-based packing materials for reversed-phase separations. In anion exchange chromatography, the stationary bed has an ionically positive (+) charged surface while the sample ions are of negative (-) charge. This technique is used almost exclusively with ionic or ionizable samples. The stronger the negative charge on the sample, the stronger it will be attracted to the positive charge on the stationary phase, and thus the longer it will take to elute. Elution in ion chromatography is effected by mobile phase pH and ionic-strength, and, to a lesser extent, operation temperature. The ability to use the full pH range and elevated temperatures are distinct advantages compared to silica-based supports.

In cation exchange chromatography, the stationary bed has an ionically negative (-) charged surface while the sample ions are of positive (+) charge. This technique is used almost exclusively with ionic or ionizable samples. The stronger the positive (+) charge on the sample, the stronger it will be attracted to the negative charge on the stationary phase, and thus the longer it will take to elute. The mobile phase is an aqueous buffer, where both pH and ionic strength are used to control elution time.

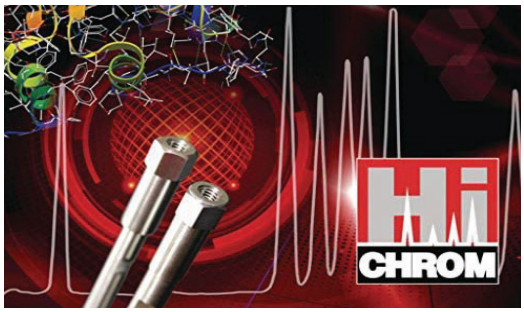
Ion chromatography can employ harsh conditions requiring mobile phases that are at very high pH limits (> 11). Temperatures well above the normal operating conditions where silica materials fail can also be used. on exclusion chromatography is an alternative to ion exchange chromatography in which ionized samples are excluded from the pores of the support and elute first, while the weakly ionized and nonionic compounds elute later.

Mixtures of weak acids, like those in fruits and milk products, are frequently not very well separated by pure ion exchange methods, nor in the reversed-phase mode.

HALO® columns utilize our innovative particle technology for faster, more efficient (u)HPLC separations.

HICHROM
Experts in Chromatography

VYDAC, ALLTIMA, ALLTIMAHP, PREVAIL, APOLLO, ALLSEP, APEX and GENESIS HPLCcolumn ranges acquired by Hichrom Limited .



Hichrom Limited are pleased to announce we have acquired the worldwide exclusive rights to manufacture Vydac®, Alltima®, Alltima® HP, Prevail™, Apollo™, Allsep®, Apex™ and Genesis™ analytical HPLC column ranges from Grace/Alltech. Hichrom have now commenced manufacture of these columns to the same exacting manufacturing protocols and to identical specifications previously used by Grace/Alltech. Part numbers also remain unaffected by the acquisition.

KNAUER

KNAUER offers an extensive range of columns and phases for HPLC. Our more than 35 years of experience in the field of liquid chromatographic separation techniques is evidenced by each and every column we deliver.
High performance quality sorbents such as our very own Eurospher provide for excellent results.
The process of manufacturing our HPLC separation columns has been thoroughly optimized.

NUCLEOSIL® is a family of totally porous spherical silicas with a very pure and uniform SiO2 structure

- Wide acceptance as routine packings for very different fields of chromatography
- One of the first spherical silicas used in HPLC
- Developed in the early seventies, it became a world-renowned HPLC packing
- Still found in many analytical and preparative applications
- An absolutely reliable choice in HPLC
- The largest variety of modified HPLC silicas available on the market.

MN
MACHEREY-NAGEL

NUCLEODUR is a fully synthetical type B silica (silica of 3rd generation) offering highly advanced physical properties:

- totally spherical particle shape, *outstanding surface microstructure, *high pressure stability
- low metal content
- NUCLEODUR as a state-of-the-art silica is the ideal base material for modern HPLC phases. It is the re sult of MACHEREY-*NAGEL's pioneering research in chromatography for almost 50 years.

Chromolith® HPLC Columns

Made of high-purity monolithic silica gel, Chromolith HPLC columns allow excellent separations in a fraction of the time that standard particulate columns require.

Columns for USP Specifications Use our convenient guide to select the right USP-specified column for your HPLC separation.

SeQuant® HILIC Columns

SeQuant® HILIC technology is the ideal choice for separations of all types of polar and hydrophilic compounds.

Purospher® HPLC Columns

Due to the absence of metals in their silica matrix and optimized surface properties, Purospher® columns ensure tailing-free separations of acidic, basic and chelating compounds.

LiChrosorb HPLC Columns

LiChrosorb is one of the most successful and reliable HPLC packing materials on the market. It is available as non-polar and polar derivatives, as well as derivatives of medium polarity.

LiChrospher HPLC Columns

LiChrospher® is a highly consistent and versatile spherical silica sorbent, which is offered with a variety of modifications.

Superspher® HPLC Columns

Superspher® columns are designed for highly efficient HPLC separations, and ideal for complex sample mixtures that require high peak capacity.

PerkinElmer
For the Better

We are happy to supply you with PerkinElmer‘s chromatography products ranging from HPLC columns to spare parts and supplies for chromatography.
Brownlee Analytical This is PerkinElmer’s all-purpose HPLC column line for conventional as well as high speed LC separations. The (110 Å) silica is equivalent to the Hypersil. Columns are available in 3 or 5 µ and lengths ranging from 30-250 mm, in 2.1 and 4.6 i.d. The Brownlee Analytical family includes Amino, C18, C8, Cyano, Phenyl, Silica, and PAH phases.

C18(2) Phase Information

Octadecyl silane ligands are bound to the silica surface, making for a very hydrophobic phase with great methylene selectivity. Non-polar endcapping virtually eliminates silanol interactions.

C5 Phase Information

Pentane silane ligands are bound to the silica surface, making for a slightly hydrophobic phase that's good for strongly hydrophobic compounds. Non-polar endcapping virtually eliminates silanol interactions.

C8(2) Phase Information

Octyl silane ligands are bound to the silica surface, making for a hydrophobic phase with moderate methylene selectivity. Non-polar endcapping virtually eliminates silanol interactions.

CN Phase Information

Nitrile groups bound to the silica surface offer a unique polar selectivity under reversed phase or normal phased conditions.

NH2 Phase Information

Amino groups bound to the silica surface serve as a weak anion exchanger and offer polar selectivity under reversed phase, normal phase, ion-exchange, or HILIC conditions.

PFP(2) Phase Information

Pentaflourophenyl groups bound to silica surface offer a unique aromatic selectivity due to highly electronegative fluorine atoms on the periphery of each phenyl ring.

HILIC Phase Information

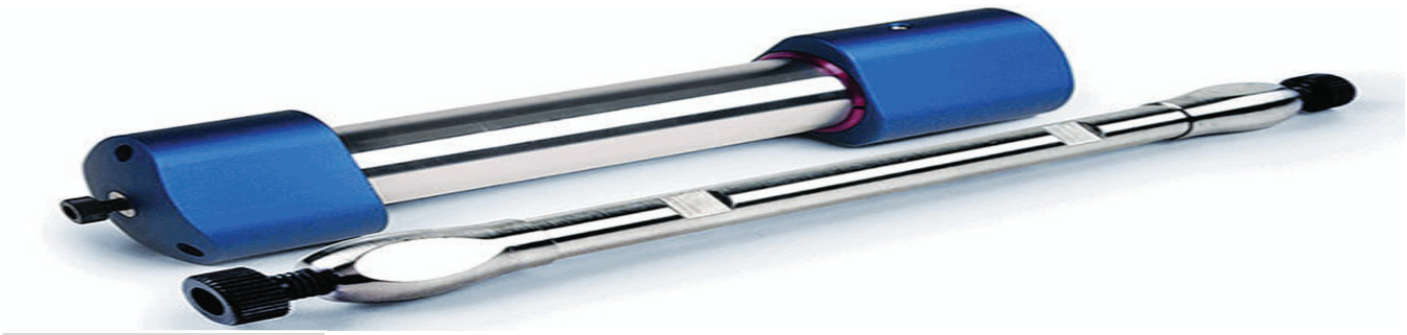
The silica surface is covered with cross-linked diol groups for polar selectivity under hydrophilic liquid chromatography conditions.

SCX Phase Information

Strong cation exchange groups are bound to the silica surface for a strong selectivity of positively charged compounds.

Normal phase

PREP C8(3)
PREP Silica(2) Phase
PREP Silica(3) Phase
Silica (2) Phase.



Luna HPLC Information

One of the World's Leading HPLC Columns
Dependable, ultra-pure silica-based HPLC columns that offer an extensive variety of selectivities which are scalable from microbore to preparative and purification scale solutions.

RESTEK
Pure Chromatography

Restek is a developer and manufacturer of innovative and high quality columns and accessories for GC and HPLC. We are pleased to offer you the entire range of products such as HPLC or GC columns from Restek.

Pinnacle® DB C18 Columns. particle size:

1.9 µm, 3µm, or 5µm, spherical, Hydrophobic C18 phase suitable for analyses of a wide range of compounds, from acidic through slightly basic. Replaces Hypersil® BDS C18 and Pinnacle® ODS Amine.

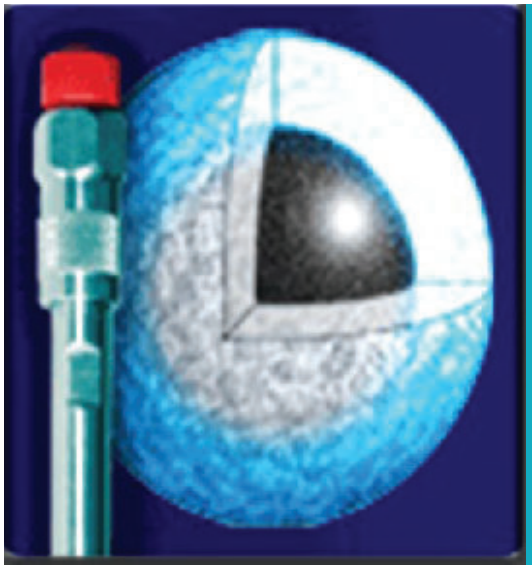
Pinnacle® II C18 Columns. particle size: 3µm or 5µm, spherical, suitable for a wide range of acidic to neutral hydrophobic compounds. Replaces Hypersil® ODS and Pinnacle® C18. Similar Phase(s):Hypersil ODS.
Pinnacle® II Amino Columns. particle size: 3µm or 5µm, spherical, The Pinnacle® II Amino column is ideal for mono- and disaccharide analyses. Replaces Hypersil® Amino and Pinnacle® Amino. Similar Phase(s): Hypersil APS 2 Amino, Spherisorb Amino.Allure® C18 Columns. particle size: 5µm, spherical, Excellent Columns for LC/MS and ELSD Ultra C18 Columns. particle size: 3m or 5m, spherical,
Excellent general-purpose reversed phase column. Similar Phase(s): Discovery C18, Symmetry C18, Hypersil Gold C18, Luna C18, Zorbax C18, Kromasil C18, LiChrospher RP-18, Inertsil ODS-2, Develosil C18.Viva C18 Columns.
particle size: 3m or 5m, spherical, for a wide range of compounds. Excellent general-purpose column for analyzing large molecules and biomolecules.
Part of the Restek USLC™ column set, which offers.

REGIS® TECHNOLOGIES, INC.

Chiral Chromatography

Discover the right chiral stationary phase (CSP) for your racemate with Regis' 13 exclusive CSPs.
IAM Chromatography Predict drug membrane permeability faster and cheaper than traditional in-vitro methods with the IAM HPLC columns.
RAM Direct Injection Separate small molecules in the presence of large biomolecules with the RAM HPLC columns.

SIGMA-ALDRICH



HPLC and UHPLC Columns Supelco's HPLC & UHPLC columns meet today's challenging needs of Fast HPLC, LC-MS, biopolymer separation, high pH conditions, as well as traditional pharmacopeia and agency methods within pharmaceutical, environmental, and food industries. Fused-Core®, polymeric, monodisperse silica, ultra-pure silica, and zirconia are some of the particle platforms that make up the Supelco HPLC product line.
Supelco has a tradition of providing innovative HPLC Columns. While Supelcosil and Discovery are trusted brands with a proven track record, Titan™ delivers leading edge UHPLC performance at an affordable cost, and Ascentis® Express and BIOshell™ (based on Fused-Core technology) have the capability to turn any HPLC system into a Fast HPLC workhorse. Furthermore, Astec chiral chromatography columns are the solution for chiral LC-MS. Supelco/Sigma-Aldrich also supplies leading brand HPLC columns, including Kromasil, TSKgel, Hamilton, LiChrospher, more.

HPLC Column Solutions
Shim-pack GIS Series

High-Performance Shim-pack XR-ODS Columns for Fast, High-Resolution Analysis
With today's demand for greater efficiency in analytical laboratories, shorter analysis time has become the most important challenge in high performance liquid chromatography.
For development or validation of analytical method, manufacturing uniformity of columns is increasing.
Shim-pack VP-ODS has been developed to meet such expectations. To minimize column-to-column performance deviation of ODS columns, silica-bases, surface treatment and packing procedures are strictly controlled respectively and only the products that passed the quality criteria are delivered to customers.
For development or validation of method, it would be efficient to run the test with a set of three columns with packings of different batches.

SHIMADZU
Excellence in Science

Since its initiation in 1940, the technical publication produced by the Shimadzu Corporation, has been used by many researchers and technology experts.
Here, Shimadzu are offering summaries of these publications.
Cutting-edge analytical technologies are used for research and development or quality control in a wide variety of fields, such as pharmaceuticals, environmental measurement, and the life sciences.
These highly accurate testing and measuring technologies are used to support product inspectionand quality control processes for manufacturing in industrial fields. They help ensure our lives are worry-free and safe.

* Particle Size Analysis
* Continuous Monitoring Analysis
* Balances
* Materials Testing & Inspection
* Non-Destructive Testing.

Shodex
is part of the Showa Denko Group respectively Showa Denko Europe, one of Japan's leading manufacturers in chemistry with subsidiaries for sales and marketing in Europe. Analytics-Shop.com is an official dealer of Shodex products. We deliver the entire Shodex product range. Besides HPLC columns, HPLC RI Detectors & Spare Parts, HPLC conductivity detectors, HPLC degasser units and size exclusion molar mass standards are available.

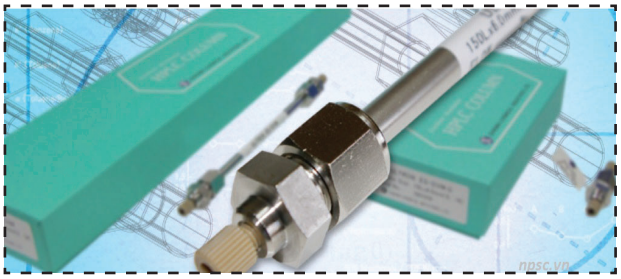
Shodex HPLC Columns
Shodex HPLC columns are available in various materials such as Asahipak, OH-Pak, OR-Pack, RS-Pak and USP-Pak. Diameter and length of columns are freely selectable as well.

SGE Analytical Science

ProteCol™ HPLC Columns - Exceed the limit
A premium inert HPLC column range delivering optimal peak shape. The ProteCol™ HPLC column range features proprietary column designs, incorporating inert materials throughout the flow path and the highest quality stationary phases.

The combination of these factors delivers unparalleled separation performance.
ProteCol™-P features a PEEK™ lining while ProteCol™-G uses a glass lining.
Benefits of an inert flow path are:
- Optimized analyte recovery.
- Superior peak shape and reproducibility.
- Less artifacts due to reduced carry over.

Shinwa Chemical



Ultron™ special LC-columns:
Ultron™ ES-OVM according to USP L57 specs.
Ultron™ ES for entantiomeric separations
Ultron™ VX-Sil for NP-chromatography
Ultron™ VX-ODS/-Octyl for RP-chromatography
Ultron™ PS-80H for Ion exclusion chromatography
Ultron™ PS-80N/-80C/-80P/CI/CL for Ligand exchange chromatography.

SHISEIDO

Shiseido
is an internationally established, japanese manufacturer of cosmetic products in the luxury segment, founded in 1872. With Shiseido HPLC this company has also distributed packing materials for liquid chromatography for a couple of years. Especially silicium polymers made Shiseido become that successful.

CAPCELL PAK is an
epoch-making HPLC column integrating the excellent separation performance of silica-based packing material and the high chemical stability of polymer-based packing material.

C4 stationary phase
for protein separation.Proteonavi has excellent acidic durability and is easy to shift from analytical to preparative size.

The SUPERIOREX ODS HPLC
column is filled with monomeric ODS packing material created from a high-purity silica with the highest carbon content (24%) among the HPLC Column Series.

The Chiral CD-Ph HPLC column is
filled with optical-resolution packing material created from precisely classified high-purity spherical silica with phenyl carbamate beta-cyclodextrin chemically bonded as a chiral selector.

A silica-based HILIC column
with phosphorylcholine (PC) group. PC HILIC shows excellent retention and separation of very polar and hydrophilic compounds.

The reduction column is
designed specially for the conversion of quinone into hydroquinone by catalytic reduction.

SUCREBEADs are
polymer-based stationary phase for sugar analysis. SUCREBEADs has high alkaline durability.

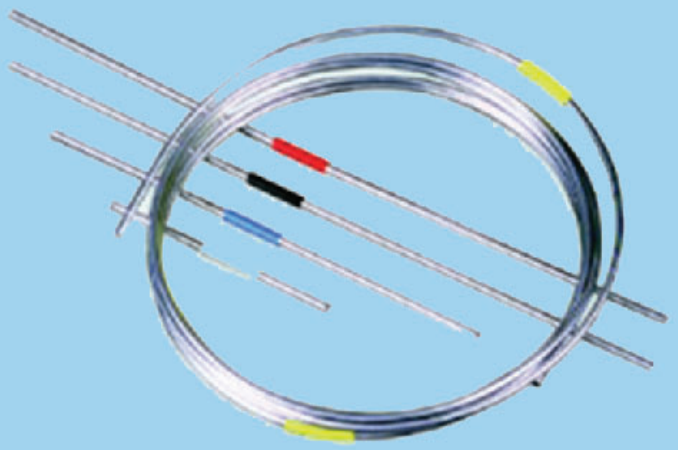
The Ceramospher HPLC column
features optical-resolution packing material with high selectivity created from a novel spherical clay mineral carrying an optically active metal complex.

SILICA is a high-performance
column filled with high-quality silica. The packing material can be classified into the SG type of high-purity silica and the AG type of general grade.

TOSOH

Thermo Fisher Scientific: manufactures innovative separation materials for a wide range of applications in a global marketplace, including Hypersil, HypercarbTM, BioBasicTM and HyPURITYTM columns.
We offer our customers a broad choice of quality HPLC columns, premium phases and innovative hardware designs to meet your application needs.

Thermo Scientific TRACE GC Columns:
Our comprehensive portfolio of TRACE™ GC Columns offer reliable, reproducible results for GC and GC/MS to meet all of your analysis needs.



Hypersil BDS 5µm C18 Columns
are a good choice for QA/QC labs as a robust general-purpose column in applications, where reproducibility and long column lifetimes are.

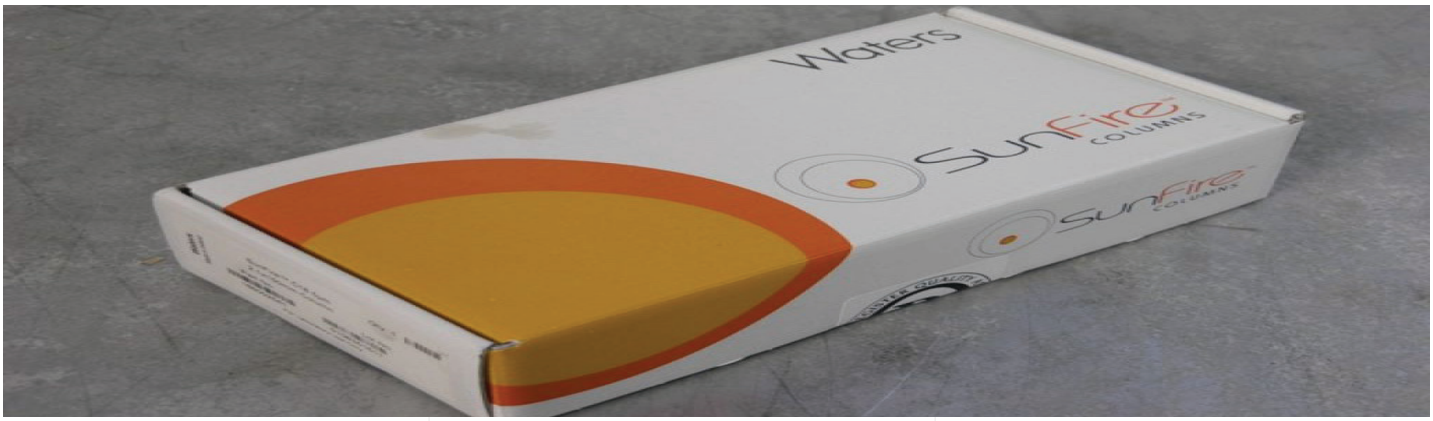
Hypersil BDS 5µm C8 Columns
offer high quality base-deactivated, fully end capped phase with similar selectivity to C18 but slightly less retention.

Hypersil BDS
5µm Cyano Columns may be used for reversed or normal phase applications.

Hypersil MOS-2 (C8) Columns Hypersil Silica Columns
have a monolayer coverage of C8 alkyl chain chemically bonded onto the silica surface for a reproducible and efficient stationary phase.

Hypersil GOLD columns
are a modern family of highly pure silica, which was developed
specifically for the demands of modern chromatography.
The Hypersil GOLD HPLC Columns are suited thanks to the
excellent peak shape for all Analyttypen.
Significant reduction in peak tailing while maintaining the C18 selectivity Very good resolu-tion,
efficiency and sensitivity.
Reliability in quality and accuracy of data analysisfor HPLC and LC/MS.

Waters™



SunFire

Columns SunFire Chromatography Columns are available in analytical and preparative dimensions and feature state of the art bonded silica designed for high mass loading capability, excellent low pH stability, superior peak shapes, and high efficiency.

CORTECS Columns

Based on 1.6 µm and 2.7 µm solid-core particle technology, CORTECS Columns enable you to achieve new levels of efficiency and performance.

Nova-Pak

Columns The bonded phases of Nova-Pak Chromatography Columns are available in 4µm and 6 µm particle sizes that offer high resolution as well as faster and more efficient chromatography.

XBridge

Columns Designed for maximum method development flexibility and fast purification. Develop robust methods for both small molecules as well as more complex biopharmaceuticals across a broad range of pH values, temperatures, and eluent choices.

Bioseparations

Columns&Consumables Chemistry consumables for the accurate analysis of peptides, proteins,oligonucleotides, glycans and amino acids.

Waters Spherisorb Columns

Waters

Spherisorb Columns are produced in a wide range of particle sizes (3-, 5-, and 10-µm) and bonded phases to meet your chromatographic needs.

XSelect

Columns The proprietary Charged Surface Hybrid (CSH) Technology that powers XSelect Columns improves selectivity and offers the highest possible performance for basic compounds in the acidic, low ionic strength mobile phases commonly used in LC-MS laboratories.

Symmetry Columns

Symmetry LC columns manufactured using high purity silica and tightly controlled manufacturing processes to ensure that you receive a column that exceeds the standards for HPLC column performance.

XTerra Columns

Based upon first generation hybrid (inorganic/organic) particles, the XTerra family of HPLC columns enables chromatographers to perform high pH drug discovery, method development and purification separations.

µBondapak®

Atlantis

Columns Atlantis analytical and preparative columns are the industry-leading solution for polar compound retention.

UHPLC

Columns Our focused selection of UHPLC columns highlight the performance advantages modern UHPLC instrumentation.

Whatman

offers a wide range of high-quality columns to meet your specific needs. In addition to the innovative.

Whatman Void Sealing Columns, Whatman makes available a selection of Whatman Compression Screw (WCS) standard end fitting column configurations for your analytical and preparative needs. They are specifically designed for compatibility with all HPLC instrumentation.

Whatman

Partisil is a high-purity irregular silica gel available in both 5 µm and 10 µm particle sizes with a pore size of 80Å. The choice of column packing includes Silica, C-18 polymeric phases (ODS-3,ODS-2) and C-8. Also available are SAX, SCX, and PAC. These columns provide reproducible results, column to column, lot to lot.

ZirChrom

ZirChrom Separations, Inc.
manufactures a full line of LC/MS friendly, ultra-durable zirconia and titania-based (HPLC) stationary phases.
Columns packed with ZirChrom® phases offer unique chromatographic selectivity coupled with the high efficiency, low back pressure and excellent pore structure of rigid inorganic supports.
All ZirChrom® standard-sized HPLC columns are backed by a 90 day risk-free warranty.

ZirChrom® columns offer today's chromatographer the following advantages:
Indestructible or resistant to a wide variety of solvents such as acids, bases, organic solvents, etc.
Cleanable with strong solvents, resulting in longer column lifetime.
Faster, cheaper analyses by using elevated temperature provided by column heater technology.
Can be used over a wide pH range.
No peak asymmetry with amines.

YMC EUROPE GMBH

Analytical Columns by YMC

C18	C18 AQ	C8	C4	Phenyl/PFP	Specialities	NP/HILIC	Chiral	IEX	SEC

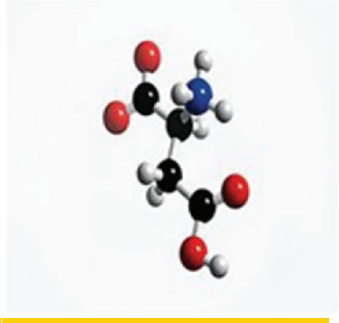
Each YMC-Pack column is chromatographically tested to assure that plate count, peak symmetry and general column performance meet YMC's high standard of quality.
A column performance report is supplied with every packed column.
Each lot of YMC-Gel stationary phase is tested with a series of specific standard probes. These tests assure lot reproducibility and confirm applicability for the class of compounds for which the product is intended.
YMC-Pack ODS-AQ is a C18 reversed phase silica based HPLC packing material specifically designed for use in 100% aqueous eluents. As a result of the proprietary derivatisation process, YMC-Pack ODSAQ exhibits a different selectivity to that of traditional C18 stationary phases. This difference in selectivity of YMC-Pack ODS-AQ can be used to advantage for HPLC separations, which are difficult to achieve with conventional C18 columns.

YMC columns for SFC
YMC offers chiral and achiral phases for supercritical fluid chromatography (SFC) applications to provide the chemist with a number of options for SFC separations.
YMC columns for chiral HPLC YMC offers several solutions for separating chiral compounds with different chiral selectors and different chiral separation mechanisms.
The selector is either coated or bonded to the support material which has different pore sizes dependent on the selector.
According to the selector chiral chromatography can be performed in normal phase and/or reverse phase mode.
YMC HILIC columns HILIC HPLC/UHPLC columns from YMC are rugged stationary phases which provide improved LC/ESI-MS response, direct SPE solvent compatibility and complementary selectivity to reversed phases.
HPLC columns for SEC YMC-Pack Diol is available in four tightly controlled porosities and is, therefore, suitable for separation and molecular weight determination of a wide range of peptides, proteins, oligonucleotides, carbohydrates and other biopolymers with molecular weights of approx 200 to several hundred thousand.

Reversed Phase (RP) HPLC Columns

Normal Phase (NP) HPLC Columns

Ion Exchange (IEX) HPLC Columns



Biochromatography HPLC Columns

CHRODEX LABORATORY

SCIENCE HAS NO LIMITS