



Purolite[®]

**Prep Columns, SPE Cartridges and
Polymer Resins for Chromatography**



Your Specialists in Chromatography

Company Profile

SepaChrom is the brainchild of the founders to create a dedicated reality, unique and able to support the **Chromatography users** optimizing their challenges.

Our Core competence is the manufacturing and trading of **High-Quality** products for **Chromatography**.

SepaChrom product portfolio includes a wide range of in-house manufactured **HPLC** Columns in both **Analytical** and **Preparative** scale, **Flash** cartridges & Instruments, and **Process** scale purification.

Our offer of products for Chromatography includes consumables and accessories, for both **HPLC** and **GC** techniques.

Our brands **Robusta**®, **Adamas**®, **Vydamas**®, **TMC**®, **Purezza**®, **Sepa-Bulk**® are only few of the product lines we propose to the **Chromatographers**.

Our Mission

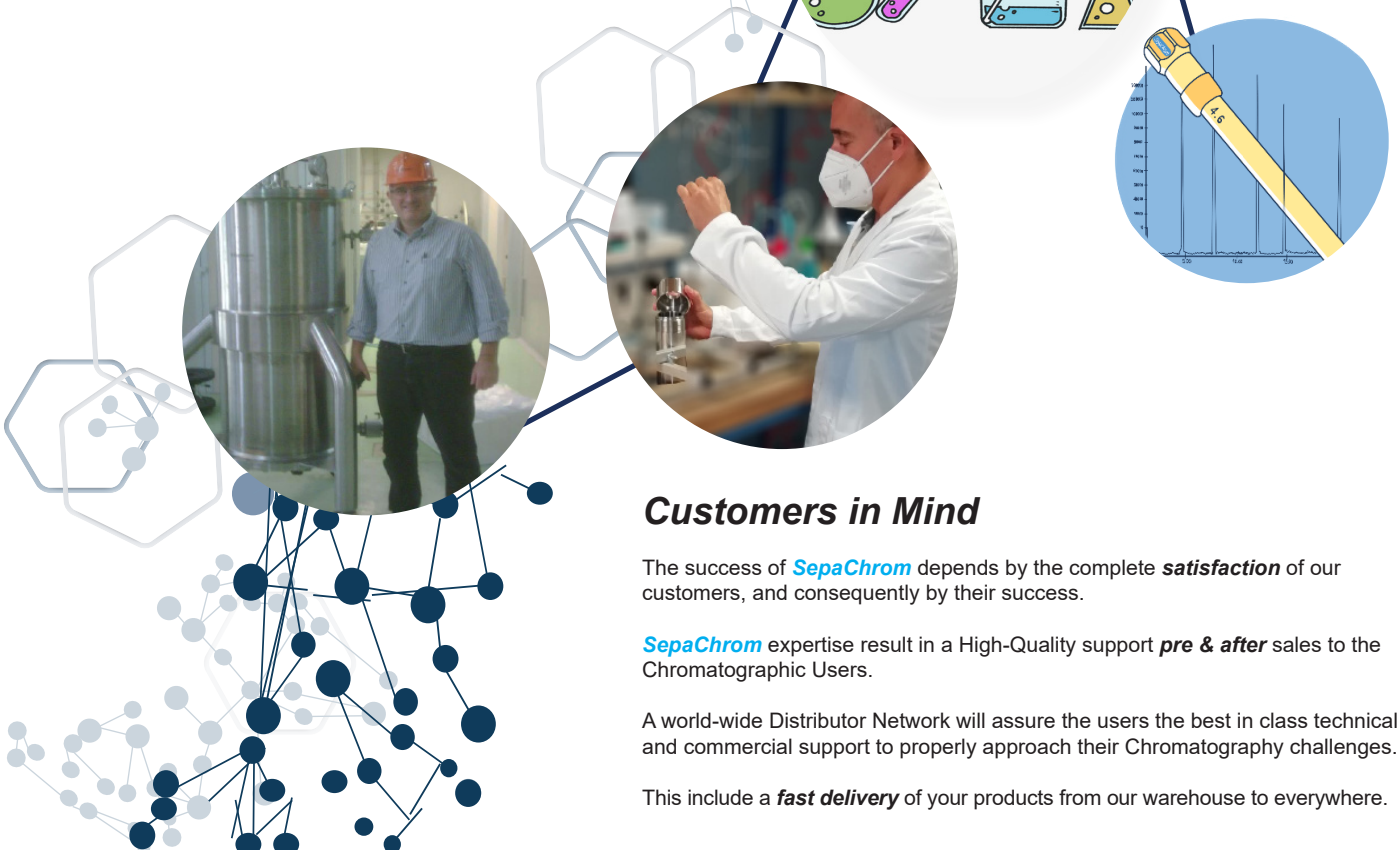
Decades of experience of our team, combined with a range of High Quality selected products and the most efficient technological solutions, allows **SepaChrom** to be a reference to :

- **Pharma,**
- **Biotech,**
- **Chemical,**
- **Food and Beverage,**
- **Cosmetic,**
- **Environmental,**
- **Clinical**
- **Petrolchemical**

industries, at **R&D** department as well **QC** laboratories and **Production**.

Our commitment is to provide the Highest Technical Support that Chromatographers expect from

Your Specialists in Chromatography



Customers in Mind

The success of **SepaChrom** depends by the complete **satisfaction** of our customers, and consequently by their success.

SepaChrom expertise result in a High-Quality support **pre & after** sales to the Chromatographic Users.

A world-wide Distributor Network will assure the users the best in class technical and commercial support to properly approach their Chromatography challenges.

This include a **fast delivery** of your products from our warehouse to everywhere.

Reversed-Phase Chromatography

Reversed-phase chromatography utilizes hydrophobic stationary phase, with a stronger affinity towards hydrophobic or non-polar compounds. Purolite® reverse phase resins are mainly based on polystyrene-DVB based polymers with high porosity and surface area to create a highly hydrophobic surface for the interaction.

Reversed-phase chromatography uses a polar (aqueous) mobile phase where hydrophobic molecules will adsorb to the hydrophobic stationary phase, and hydrophilic molecules will pass through uninterrupted. Hydrophobic molecules are eluted from the resin by decreasing the polarity of the mobile phase via use of non-polar solvent such as alcohol, which reduces hydrophobic interactions.

The more hydrophobic the molecule, the higher the concentration of solvent needed to elute the molecule.

Reverse Phase Chromatography is a frequently used analytical method to quantify and separate various molecules such as betalactam antibiotics, flavors, polyphenols, vitamins, peptides, oligonucleotides and many more. Some applications where additional separations are needed such as ion exchange in a mixed mode type of separation (such as a reverse phase chromatography resin with ion exchange capabilities).

Purolite® offer such resin for the separations of peptides and oligonucleotides such as 10AD2S (cation exchanger) and 10AD2Q (anion exchanger).

Chromalite™ Resin Specification

Phase	Principal Applications	Advantages
5AD2	Analytical Reversed-Phase Chromatography (RP-HPLC) Separation of Proteins, Peptides and Oligonucleotides Ideal for Biomolecules Purification and Polishing Preparative Reversed-Phase Chromatography	Highly Hydrophobic
10AD2		High Chemical Stability
15AD2		More Robust than Silica Materials
30AD2		Easy Packing for HPLC Application
		Efficient Regeneration
		Narrow Particle Size Distribution

Chromalite™ Resin Specification

Phase	Functional Group	Particle Size (90% in Range)	Mean Diameter	Surface Area	Porosity	pH Stability	USP Code
5AD2	None	3 - 7µm	4 - 6µm	500m ² /g	200-300Å	1 - 14	L21
10AD2	None	7 - 13µm	8 - 12µm	500m ² /g	200-300Å	1 - 14	L21
15AD2	None	12 - 18µm	13 - 17µm	500m ² /g	200-300Å	1 - 14	L21
30AD2	None	24 - 36µm	27 - 33µm	350m ² /g	200-300Å	1 - 14	L21

Ordering Information

Phase	Particle Size	Length / ID	7.8mm	10.0mm	21.2mm	30.0mm	50.0mm
Chromalite™ 5AD2	5µ	100mm	PL0001	PL0004	PL0007	PL0010	PL0013
	5µ	150mm	PL0002	PL0005	PL0008	PL0011	PL0014
	5µ	250mm	PL0003	PL0006	PL0009	PL0012	PL0015
Chromalite™ 10AD2	10µ	100mm	PL0016	PL0019	PL0022	PL0025	PL0028
	10µ	150mm	PL0017	PL0020	PL0023	PL0026	PL0029
	10µ	250mm	PL0018	PL0021	PL0024	PL0027	PL0030
Chromalite™ 15AD2	15µ	100mm	PL0031	PL0034	PL0037	PL0040	PL0043
	15µ	150mm	PL0032	PL0035	PL0038	PL0041	PL0044
	15µ	250mm	PL0033	PL0036	PL0039	PL0042	PL0045
Chromalite™ 30AD2	30µ	100mm	PL0046	PL0049	PL0052	PL0055	PL0058
	30µ	150mm	PL0047	PL0050	PL0053	PL0056	PL0059
	30µ	250mm	PL0048	PL0051	PL0054	PL0057	PL0060

Chromalite™ Resins for Chromatography

The Chromalite chromatography product range provides a comprehensive line of products for a variety of applications. The Chromalite AD, PCG, MN and GN polymeric resins are designed for adsorption, reverse-phase chromatography (RPC) and solid phase extraction (SPE). These rigid, polymeric resins are extensively used for analysis and purification.

The Chromalite resins feature the most desirable properties of modern chromatography resins including mechanical robustness, inertness, pH stability and flexibility, through their compatibility with organic solvents and aqueous solutions.

The range of particle sizes provides scalability from analytical to industrial-scale purification and the Chromalite range also features a selection of porosities, surface areas and chemistries, designed to meet the needs of customers in a range of industries.

Chromalite resins are currently being used for the purification and analysis of amino acids, peptides, small proteins, organic acids, carbohydrates and inorganic cations and anions.

All Chromalite resins are hydrophobic, robust and have excellent chemical stability. They are highly stable to organic solvents and show minimal swelling when changing between different solvents and salts. You have greater flexibility in the choice of elution conditions and cleaning regimes, including the use of sodium hydroxide or hydrochloric acid, which increases sample throughput and the number of cycles achieved per column.

All resins are stable from pH 1-14 and are highly stable to organic solvents, showing minimal swelling when changing between different solvents and salts.

Chromalite™ Resin Specification						
Resin	Phase	Matrix	Particle Size	Surface Area	Porosity	Applications
Chromalite™ AD	5AD2	Macroporous Polystyrene/DVB	5µm	500m ² /g	200-300Å	• RP-HPLC
	10AD2	Macroporous Polystyrene/DVB	10µm	500m ² /g	200-300Å	
	15AD2	Macroporous Polystyrene/DVB	15µm	500m ² /g	200-300Å	
	30AD2	Macroporous Polystyrene/DVB	30µm	350m ² /g	200-300Å	
Chromalite™ PCG	PCG600F	Macroporous Polydivinylbenzene	35µm	600m ² /g	70-150Å	<ul style="list-style-type: none"> • Adsorption • RP-low pressure chromatography • Solid phase extraction
	PCG900F	Macroporous Polydivinylbenzene	35µm	600m ² /g	150-300Å	
	PCG1200F	Macroporous Polydivinylbenzene	35µm	600m ² /g	300-500Å	
	PCG950F	Macroporous Methacrylate	35µm	500m ² /g	150-300Å	
	PCG600M	Macroporous Polydivinylbenzene	75µm	600m ² /g	70-150Å	
	PCG900M	Macroporous Polydivinylbenzene	75µm	600m ² /g	150-300Å	
	PCG1200M	Macroporous Polydivinylbenzene	75µm	600m ² /g	300-500Å	
	PCG950M	Macroporous Methacrylate	75µm	500m ² /g	150-300Å	
	PCG600C	Macroporous Polydivinylbenzene	125µm	600m ² /g	70-150Å	
	PCG900C	Macroporous Polydivinylbenzene	125µm	600m ² /g	150-300Å	
	PCG1200C	Macroporous Polydivinylbenzene	125µm	600m ² /g	300-500Å	
	PCG950C	Macroporous Methacrylate	125µm	500m ² /g	150-300Å	
	PCG1200MHEMA	Hydroxyethyl Methacrylate/DVB	75µm	500m ² /g	200-400Å	
Chromalite™ MN	70MN	Polystyrene	70µm	1200m ² /g	20-50Å	<ul style="list-style-type: none"> • Adsorption • RP-low pressure chromatography • Solid phase extraction
Chromalite™ GN	GN	Polystyrene/Divinylbenzene	3 - 50µm	350m ² /g	200-300Å	<ul style="list-style-type: none"> • Adsorption • RP-HPLC • Solid phase extraction

Purolite resins include Ion Exchange functionalizations (Chromalite™ CGA and CGC) and a wide range of Methacrylic Resins (Chromalite™ M); contact our office for further information.

PuroPhase™ SPE Reverse Phase

A New Complete Platform for Solid Phase Extraction

1. Description

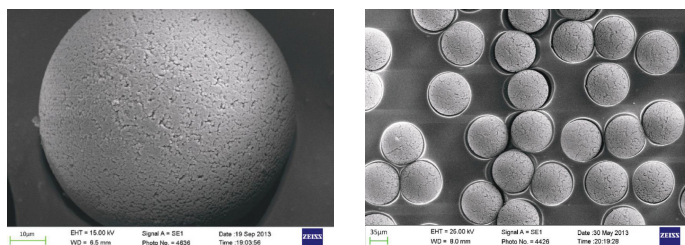
Purolite PuroPhase™ SPE Reverse Phase products are designed to support in the retention and analyses of hydrophobic and hydrophilic molecules. PuroPhase SPE Reverse Phase products are offered in 6 different Chromalite® adsorbent features for various analyte extraction and cleanup needs. All adsorbents are made of robust, synthetic, scalable, reliable, reproducible polymers with different properties in terms of hydrophobicity and porosity.

2. Properties

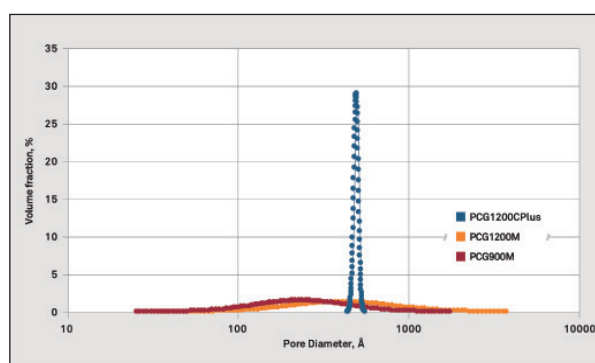
PuroPhase SPE Reverse Phase Product	Adsorbent matrix	Porosity (A)	Exclusion limit (MW)	Surface Area (m ² /g)	Functional Group/ Interaction Type
Screening KIT	Assortment of PuroPhase SPE phase adsorbents and tube dimensions ideally suited for method development	Assorted	Assorted	Assorted	Assorted
PCG1200M	Porous polydivinylbenzene adsorbent	250 - 450	96000	>600	None/ Hydrophobic
PCG900M	Porous polydivinylbenzene adsorbent	125 - 250	96000	>600	None/ Hydrophobic
PCG600M	Porous polydivinylbenzene adsorbent	75 - 150	34000	>700	None/ Hydrophobic
70MN	Hyper-crosslinked polystyrene adsorbent	20 - 50	N/A	>1200	None/ Hydrophobic
PCG-1200CPlus	Porous polydivinylbenzene adsorbent	270 - 370	252000	>800	None/ Hydrophobic
PCG-1200MHEMA	Porous adsorbent, copolymer of hydroxyethyl methacrylate/DVB	250 - 540	N/A	>500	None/ Hydrophilic



3. Polymer characteristics – Spherical uniform particle size



4. Polymer characteristic – Controlled porosity



PuroPhase SPE Columns

Adsorbent Matrix	PuroPhase Media	Bed Mass mg	Volume	Particle Size μ	Qty	Part.No
Assortment of PuroPhase SPE Phase chemistries and tube dimensions ideally suited for method development	PuroPhase SPE Reverse Phase Developmental KIT	230	1mL & 3mL	60 & 200	60pk	LH0019
	Macroporous Polydivinylbenzene Adsorbent	Reverse Phase PCG1200M	180	1mL	60	100pk
230			3mL	200	50pk	LH0005
250			6mL	500	30pk	LH0006
Reverse Phase PCG900M		180	1mL	60	100pk	LH0007
		230	3mL	200	50pk	LH0008
		250	6mL	500	30pk	LH0009
Reverse Phase PCG600M	180	1mL	60	100pk	LH0010	
	230	3mL	200	50pk	LH0011	
	250	6mL	500	30pk	LH0012	
Hyper-crosslink polystyrene adsorbent	Reverse Phase 70MN	180	1mL	60	100pk	LH0013
		230	3mL	200	50pk	LH0014
		250	6mL	500	30pk	LH0015
Macroporous Adsorbent, copolymer of N-vinylpyrrolidone/DVB	Reverse Phase PCG1200MHLB	180	1mL	60	100pk	LH0016
		230	3mL	200	50pk	LH0017
		250	6mL	500	30pk	LH0018
Macroporous Adsorbent, copolymer of hydroxymethyl methacrylate/DVB	Reverse Phase PCG1200HEMA	180	1mL	60	100pk	LH0001
		230	3mL	200	50pk	LH0002
		250	6mL	500	30pk	LH0003

Bulk SPE Packing



Are you looking for High-Quality Bulk Packing for Your SPE Columns?
Contact us for a quote !

Bulk SPE Packing Available				
Packing	Porosity	Average Particle Size	Qty	Part.No
Silica (SI)	60Å	50μ	250g	FA0056
Standard C18	60Å	50μ	250g	FA0042
Cyano	60Å	50μ	250g	FA0051
Diol	60Å	50μ	250g	FA0053
Aminopropyl	60Å	50μ	250g	FA0055

Other products available from SepaChrom

HPLC

HPLC Silica Based Columns for Routine Analysis
 HPLC & UHPLC Silica Based Columns for Small Molecules Separation
 HPLC Silica Based Columns for Large Molecules Separation
 HPLC Silica Based Columns for Traditional Chinese Medicine
 Polymer Base Columns for Carbohydrate & Organic Acids Analysis Chiral HPLC Columns
 Ion Chromatography Columns for Anions and Cations Analysis

VYdamas®

ROBUSTA®

Adamas®

MEDIA

Irregular & Spherical Silica Gel for Flash, Preparative & Industrial Purification
 Raw & Bonded Silica Gel for Any Application
 Wide Range Porosity (30Å- 2500Å) and Particle Size (10µ-200µ)
 Polymer Based Resin for Reversed Phase and Ion Exchange Chromatography

PREP

10mm - 50mmID Packed Preparative Columns for Lab Scale Purification packed by SepaChrom
 50mm - 2000mmID Process Scale Chromatography Columns & Systems, Flanged & DAC Technology
 OEM Packed Preparative Columns
 Scale-up Method Development & Custom Packing Service

ROBUSTA®

Adamas®

VYdamas®

FLASH

Instruments for Flash and Prep Chromatography up to 825mL/min & 400 bar pressure
 Integrated ELSD & MS Simple Quad Detector for Flash Purification
 TLC Plates and Accessories for Flash Chromatography
 A Complete Range of Flash Columns for All Existing Flash Instruments

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Advion Interchim

SPE

SEClute™, Extract-Clean™, Maxi-Clean™ SPE Cartridges for Pharma, Environmental, Food&Beverage Applications.
 PuroPhase™ Polymer Base SPE Cartridges for Clinical & Forensic Applications.
 Maxi-Clean™ Ion Chromatography SPE Cartridges
 Vydac® - Bioselect SPE Cartridges for Biological Samples
 Accessories for SPE & Syringe Filters

OTHER INSTRUMENTS

SepaChrom Hydrogen, Nitrogen and Air Generators for GC
 SepaChrom Nitrogen Generators for LC-MS
 Automated Sample Evaporators for Lab Scale Purification
 Interchim Advion CMS Compact Mass Spectrometer Detector

CONSUMABLE

Autosampler Vials for HPLC, IC e GC
 Head Space and Sampling Vials
 SS & PEEK Tubing, Fittings, Ferrule & Valves
 Syringes and Septa for GC
 Traps for GC Gas Lines

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