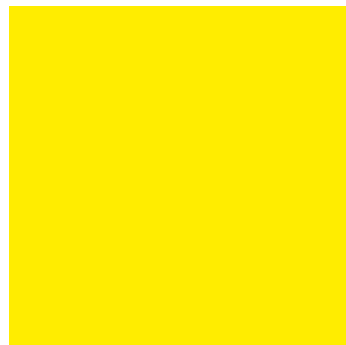


Your Specialists in Chromatography



Flash Chromatography Instruments, Cartridges & Silica



purezza®

SepaChrom

Purification by liquid chromatography is always a challenge and there is often a compromise needed to obtain the desired purity, loading and throughput. **SepaChrom** offers the complete line of Flash and Prep LC chromatography instruments manufactured by Interchim. They are designed to exceed today's chemist's requirements, and to make your purification easier, intuitive and productive. **SepaChrom** service programs assure the users of the best performance of their instruments, with routine maintenance programs and prompt intervention when needed.

A full range of Flash & Prep LC Columns, Accessories and Bulk completes the Flash Chromatography product line that **SepaChrom** offers to our customers.



PF-XS 520Plus
Very Small & Powerful

20 bar

300 mL/min



PF 5.020
The Partner of Daily Challenges

20 bar

300 mL/min



PF 5.050
Cross-over Flash / Prep

50 bar

250 mL/min



PF 5.125
Complex Purifications with Confidence

125 bar


250 mL/min

PURIFLASH® ULTRA PERFORMANCE FLASH PURIFICATION™



InterSoft® X
Keeps Intelligence Simple, Smart

Genius
Keeps Intelligence Simple, Smart



PF 5.400
The Ultra-Purification

400 bar

125 mL/min



PF 5.250
Very Small, Hyper Powerful

250 bar

250 mL/min



PF 5.007
Process - Kilo-Lab

7 bar

750 mL/min

Generation 5



PF 5.125P
The Peptide Specialist

125 bar


250 mL/min



PF 5.250P
Purification of Complex Mixtures of Peptides

250 bar

125 mL/min



PF 5.020B
The Proteins Specialist

20 bar

100 mL/min



interchim

puriFlash® MS Platform
Makes Purification Easier, Intuitive & Productive

- Smaller Particles Size
- High Quality Pump
- Automation
- 2D Purification
- NP to RP Quick Switch
- Intuitive Software
- Selectivity from a large choice of stationary phases
- Triple Detection UV - ELSD - MS
- No Downtime / Built to last

Purezza® - High Performance Flash Cartridges

Purezza® is the new Sepachrom family of High Performance Flash Chromatography Cartridges. We use ultra-pure silica gel as well as pharmaceutical grade polypropylene cartridges to assure high performance and trouble free purification.

Our cartridges offer several advantages over other products on the market : Low Fines, Neutral pH, 100% leak-free, No Tailing or Channelling, Lot-to-Lot Reproducibility and full compatibility with most instruments on the market :

- **Teledyne Isco** (CombiFlash®, Rf, Companion®, Retrieve®, OptiX®)
- **Biotage** (Isolera™, SP, Flash, FlashMaster II)
- **Armen** (Spot Flash System)
- **Interchim** (puriFlash® line) -
- **Buchi - previously Grace** (Reveleris® X1 & X2, Reveleris® Prep).
- **Gilson** (PLC)

Purezza® Bonded Phase High Performance Flash Cartridges are also available in: **C18, C8, C4, CN, HILIC, NH₂, Diol, SCX, SAX, Alumina and Chiral.**

Purezza® High Performance Flash Cartridges are available in 5 lines : **Purezza® Daily, Purezza® Daily^{Plus}, Purezza® Sphera, Purezza® Sphera^{Plus}, Purezza® Sphera^{Star}** and 2 hardware options: **Standard** and **Open-Load** to support all of the chemist's challenges in their laboratory's purifications.



Purezza® Daily
50µ
Irregular Silica Gel



Purezza® Daily^{Plus}
30µ
Irregular Silica Gel



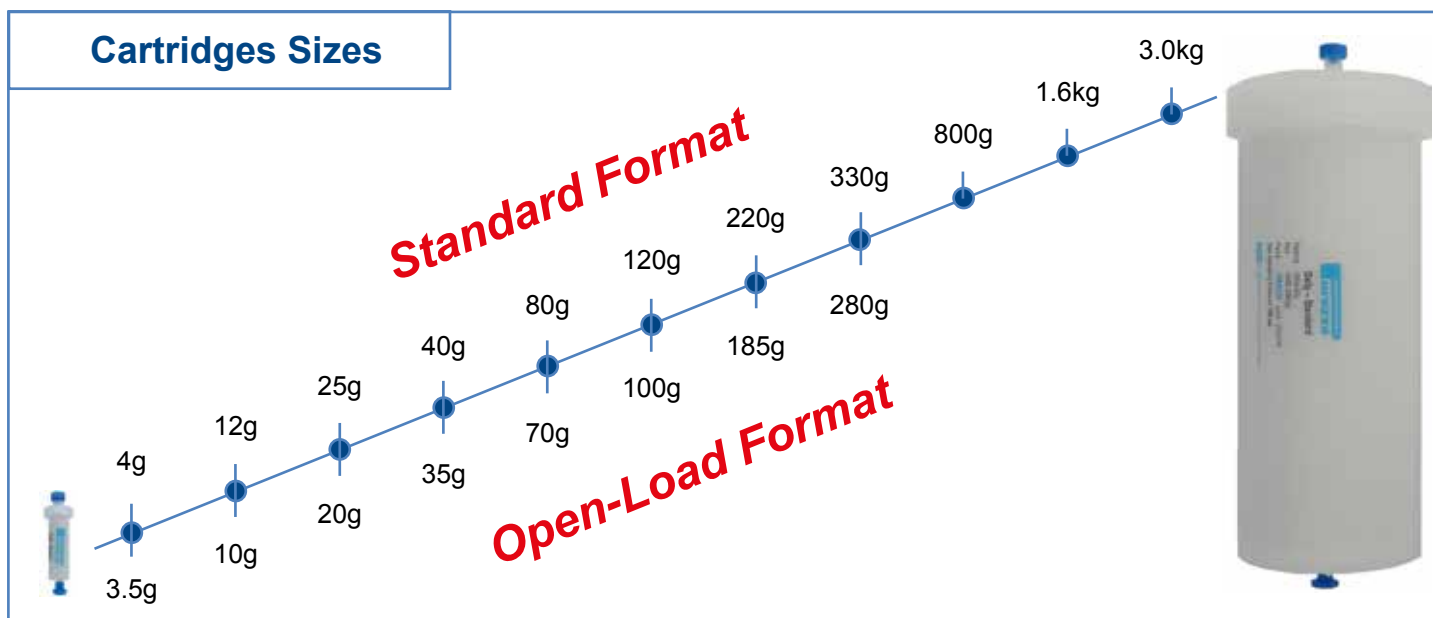
Purezza® Sphera
50µ
Spherical Silica Gel



Purezza® Sphera^{Star}
15µ
Spherical Silica Gel



Purezza® Sphera^{Plus}
25µ
Spherical Silica Gel



Cartridge Hardware Formats

Standard

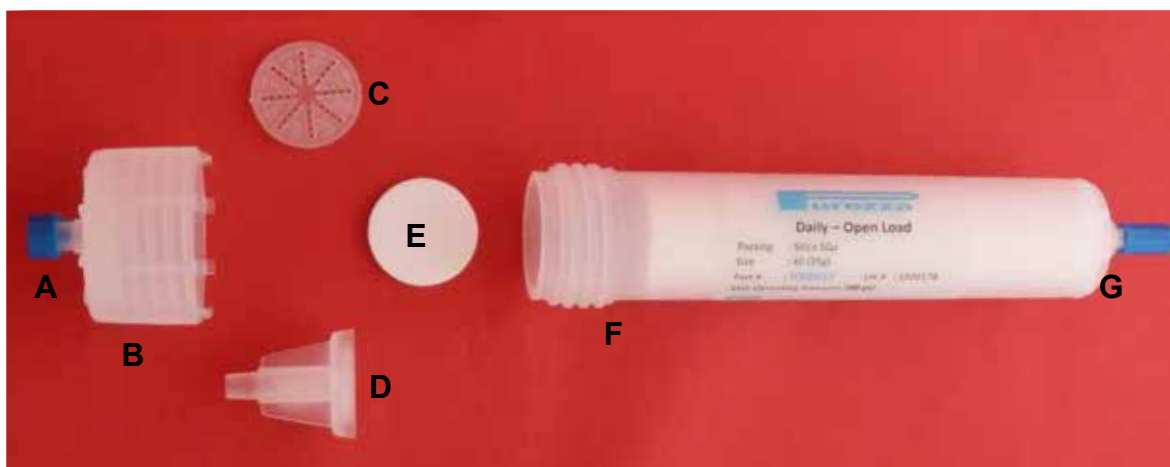
The **Purezza® Standard Format Cartridges** use a Pharmaceutical grade Polypropylene material to ensure virtually zero cross contamination and reliable and reproducible purification.

The Luer-Lock end fittings make the Standard format compatible with most Flash Chromatography Instruments on the market. The Distribution Disk on top of the column ensures the best flow distribution path onto the column and the design can withstand pressure up to 300 psi (depending on the size) with no leak.



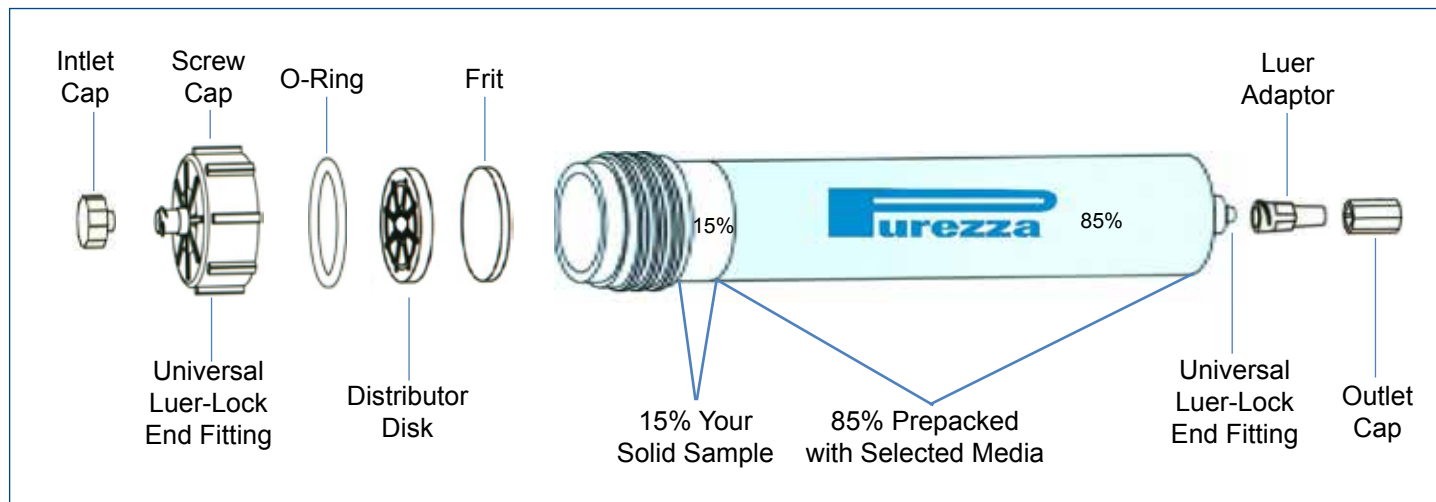
Open-Load

The **Purezza® Open-Load Format Cartridges** use the same Pharmaceutical grade Polypropylene material as the Standard Format. The Luer-Lock end fittings make the Open-Load format **compatible with most Flash Chromatography** Instruments on the market, in particular they are **ideal for use with Biotage systems**. The Open-Load design allow the chemist to **choose between liquid injection or dry loading** (sample/silica mix) directly on top of the cartridge, without any other accessory (i.e. samplet). Pressure limit is up to 200 psi according to the cartridge size.



- A - UNIVERSAL LUER-LOCK END FITTING** to connect the cartridge to most Flash Chromatography Instruments on the market. A Blue end caps keep the media dry when not in use.
- B - SCREW CAP.** Contains an **O-RING** (Fluorocarbon or Silicone) to ensure maximum sealing.
- C - DISTRIBUTOR DISK** to have optimal flow distribution when **SOLID LOADING** Injection is used.
- D - Insert** made in PPHD (Polypropylene High Density) to obtain optimal flow distribution when **LIQUID INJECTION** is used.
- E - Polyethylene FRIT** to keep media in place.
- F - Cartridge body** is **85% PACKED WITH MEDIA** and has **15%** empty space to be filled with your **SOLID SAMPLE**.
- G - UNIVERSAL LUER-LOCK END FITTING** to connect the cartridge to most Flash Chromatography Instruments on the market. A Blue end caps keep the media dry when not in use.

How Does the Open-Load Cartridges Hardware Work?



Open-Load Cartridge Concept for Dry Sample Loading



1 - Remove the screw top cap



2 - Remove the PPHD Insert



3 - Load your sample in the free space



4 - Put the extra frit on top of your sample



5 - Put the distributor disc on top of the frit



6 - And close back the cartridge tightly.

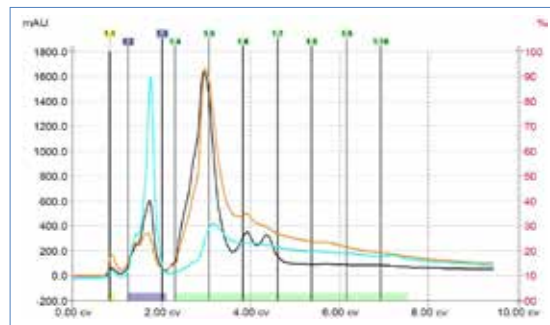
7 - The cartridge is now ready for your purification.



Small Molecules Purification Operative Parameters :

Cartridge : Purezza®-Sphera^{Plus}
Size : 25g
Solvent : A - Hexane
 B - Ethylacetate
Flow Rate : 25mL/min
UV1 : 254 nm
UV2 : 285 nm
UV3 : 324 nm

Gradient	
CV	Solvent A/B
1	0.0 80:20
2	1.0 70:30
3	11.0 0:100



Purezza® - Daily

The **Purezza®-Daily Cartridge** hardware is made from Pharmaceutical grade Polypropylene material to ensure virtually zero cross contamination and it is ideal for reliable and reproducible purification.

They are available in both **Standard** and **Open-Load** versions and compatible with most of the Flash Chromatography instruments available on the market. On Biotage systems we recommend the Open-Load version as the outlet Luer-Lok fitting eliminates the fluid connection leaking or coming off when there are instrument pressure pulses. The high pressure limits ensure they can be used with the newest Flash Chromatography systems on the market.

The best Quality/Price ratio make these cartridges the best choice for Daily purifications.

Purezza®-Daily - Specifications	
Packing	High Quality Silica Gel
Particle Size	50µ IRREGULAR
Porosity	60Å
Surface Area	500 m ² /g
pH	6,5-7,5
USP Designation	L3



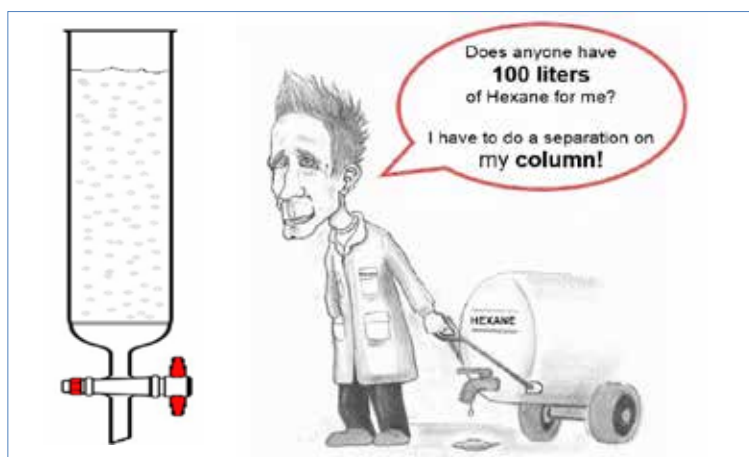
Purezza®-Daily Flash Cartridges - Silica - Standard Type

Size	Type	Material	Particle Size	Packing Qty	Loading Capacity (0.1-10%)	Suggested Flow Rate (Max mL/min)	Max Pressure (psi)	Qty/Box	Part.No.
S-4	Standard	Silica	50µ	4g	4-400mg	15 (40)	300	20	HB0028
S-12	Standard	Silica	50µ	12g	12-1200mg	25 (60)	300	18	HB0029
S-25	Standard	Silica	50µ	25g	25-2500mg	25 (60)	300	12	HB0030
S-40	Standard	Silica	50µ	40g	40-4000mg	30 (70)	300	12	HB0031
S-80	Standard	Silica	50µ	80g	80-8000mg	50 (100)	200	10	HB0032
S-120	Standard	Silica	50µ	120g	0.120-12g	60 (150)	200	10	HB0033
S-220	Standard	Silica	50µ	220g	0.220-22g	100 (220)	150	6	HB0034
S-330	Standard	Silica	50µ	330g	0.330-33g	120 (220)	150	5	HB0035
S-800	Standard	Silica	50µ	800g	0.800-80g	150 (300)	100	1	HB0036
S-1600	Standard	Silica	50µ	1600g	1.6-160g	200 (500)	100	1	HB0037
S-3000	Standard	Silica	50µ	3000g	3-300g	250 (500)	100	1	HB0038

Automated Flash Chromatography vs. Glass Column Chromatography

Automated Flash Chromatography Systems using Pre-Packed Flash Columns help you to:

- **Save up to 50% Solvent**
- **Save up to 90% of Time**
- **Use Gradients** (For Improved Resolution)
- **Achieve Higher Recovery and Purity**
- **Have Higher Loadability**
- **Have Higher Column to Column Reproducibility**
- **Ensure Improved Safety** (No Glass or Silica Handling)



Purezza®-Daily Flash Cartridges - Silica - Open-Load Type

Size	Type	Material	Particle Size	Packing Qty	Loading Capacity (0.1-10%)	Suggested Flow Rate (Max mL/min)	Max Pressure (psi)	Qty/Box	Part.No.
S-4	Open-Load	Silica	50µ	3.5g	3.5-350mg	15 (40)	200	20	HB0012
S-12	Open-Load	Silica	50µ	10g	10-1000mg	25 (60)	200	18	HB0013
S-25	Open-Load	Silica	50µ	20g	20-2000mg	25 (60)	200	12	HB0014
S-40	Open-Load	Silica	50µ	35g	35-3500mg	30 (70)	200	12	HB0015
S-80	Open-Load	Silica	50µ	70g	70-7000mg	50 (100)	200	10	HB0016
S-120	Open-Load	Silica	50µ	100g	0.100-10g	60 (150)	200	10	HB0017
S-220	Open-Load	Silica	50µ	185g	0.185-18.5g	100 (220)	150	6	HB0018
S-330	Open-Load	Silica	50µ	280g	0.280-28g	120 (220)	150	5	HB0019

Purezza® - Daily^{Plus}

The **Purezza®-Daily^{Plus} Cartridge** uses 30µm Irregular Silica Gel to ensure a higher efficiency for difficult purification challenges. Comparing 30µm to 50µm Irregular Silica loading capacity and sample recovery will improve drastically (up to 50% under certain conditions).

These cartridges are the best choice for daily purifications where high efficiency is needed.

The **Purezza®-Daily^{Plus} Cartridge** hardware is made with a Pharmaceutical grade Polypropylene material to ensure virtually zero cross contamination and for reliable and reproducible purification.

They are compatible with most of the Flash Chromatography instruments available on the market.

Purezza®-Daily ^{Plus} - Specifications	
Packing	High Quality Silica Gel
Particle Size	30µ IRREGULAR
Porosity	60Å
Surface Area	500 m ² /g
pH	6,5-7,5
USP Designation	L3



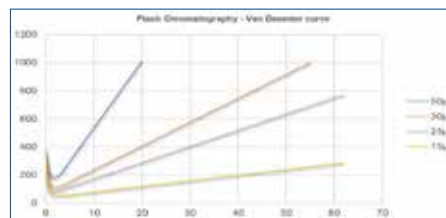
Purezza®-Daily ^{Plus} Flash Cartridges - Silica - Standard Type									
Size	Type	Material	Particle Size	Packing Qty	Loading Capacity (0.1-15%)	Suggested Flow Rate (Max mL/min)	Max Pressure (psi)	Qty/Box	Part.No.
S-4	Standard	Silica	30µ	4g	4-600mg	15 (30)	300	20	HB0039
S-12	Standard	Silica	30µ	12g	12-1800mg	25 (50)	300	18	HB0040
S-25	Standard	Silica	30µ	25g	25-3800mg	25 (50)	300	12	HB0041
S-40	Standard	Silica	30µ	40g	40-6000mg	30 (60)	300	12	HB0042
S-80	Standard	Silica	30µ	80g	80-12000mg	50 (80)	200	10	HB0043
S-120	Standard	Silica	30µ	120g	0.120-18g	60 (100)	200	10	HB0044
S-220	Standard	Silica	30µ	220g	0.220-33g	80 (160)	150	6	HB0045
S-330	Standard	Silica	30µ	330g	0.330-50g	100 (160)	150	5	HB0046



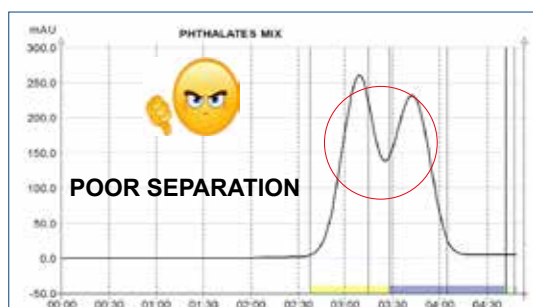
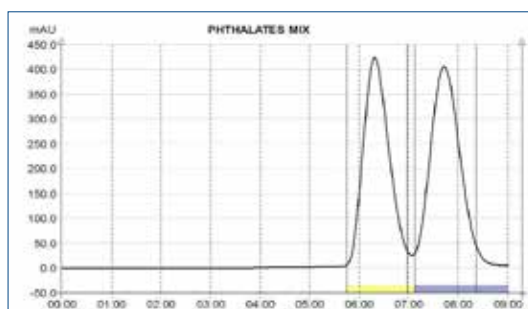
Particle Size & Flow Rate

Did you know that High Performance Columns packed with smaller particle size media (15µm - 25µm - 30µm) can work at higher flow rate without loss of efficiency?

Here are 3 examples of Van Deemter curves using High Flow Rates with Smaller Particle Size.

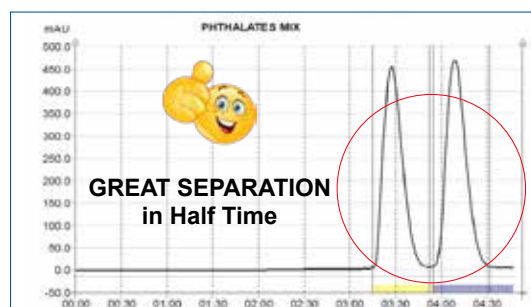


Flow/Rate 20mL/min
Purezza®-Daily
50µ 12g



40mL/min
Purezza®-Daily
50µ 12g

40mL/min
Purezza®-Sphera
15µm 12g



Purezza® - Sphera

The **Purezza®-Sphera Cartridge** uses **High Capacity** and **Purity** Silica Gel. Thanks to the high Surface Area they provide a higher sample interaction and higher sample loading, up to 15% of their weight.

The **Purezza®-Sphera Cartridge** hardware is made with a Pharmaceutical grade Polypropylene material to ensure virtually zero cross contamination and it is ideal for reliable and reproducible purification.

They are available in both **Standard** and **Open-Load** versions and compatible with most of the Flash Chromatography instruments available on the market. On Biotage systems we recommend the Open-Load version as the outlet Luer-Lok fitting eliminates the fluid connection leaking or coming off when there are instrument pressure pulses. The high pressure limits ensure they can be used with the newest Flash Chromatography systems on the market.

The **Purezza®-Sphera Cartridge** are the best choice for complex matrix purifications in your laboratory.

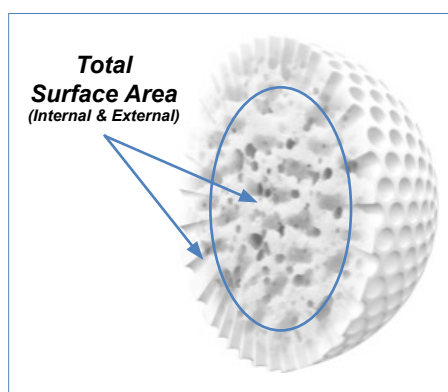
Purezza®-Sphera - Specifications	
Packing	High Capacity Silica Gel
Particle Size	50µ SPHERICAL
Porosity	60Å
Surface Area	700 m ² /g
pH	6,5-7,0
USP Designation	L3



Purezza®-Sphera Flash Cartridges - Silica - Standard Type									
Size	Type	Material	Particle Size	Packing Qty	Loading Capacity (0,1-15%)	Suggested Flow Rate (Max mL/min)	Max Pressure (psi)	Qty/Box	Part.No.
S-4	Standard	Silica	50µ	4g	4-600mg	15 (40)	300	20	HB0047
S-12	Standard	Silica	50µ	12g	12-1800mg	25 (60)	300	18	HB0048
S-25	Standard	Silica	50µ	25g	25-3800mg	25 (60)	300	12	HB0049
S-40	Standard	Silica	50µ	40g	40-6000mg	30 (70)	300	12	HB0050
S-80	Standard	Silica	50µ	80g	80-12000mg	50 (100)	200	10	HB0051
S-120	Standard	Silica	50µ	120g	0.120-18g	60 (150)	200	10	HB0052
S-220	Standard	Silica	50µ	220g	0.220-33g	100 (220)	150	6	HB0053
S-330	Standard	Silica	50µ	330g	0.330-50g	120 (220)	150	5	HB0054
S-800	Standard	Silica	50µ	800g	0.800-120g	150 (300)	100	1	HB0055
S-1600	Standard	Silica	50µ	1600g	1.6-240g	200 (300)	100	1	HB0056
S-3000	Standard	Silica	50µ	3000g	3-450g	250 (500)	100	1	HB0057

Surface Area & Interaction

Higher Surface Area of Spherical Media provides higher Interaction between Silica and Targets compounds and consequently gives much better separation with complex matrices.



Purezza®-Sphera Flash Cartridges - Silica - Open-Load Type									
Size	Type	Material	Particle Size	Packing Qty	Loading Capacity (0,1-15%)	Suggested Flow Rate (Max mL/min)	Max Pressure (psi)	Qty/Box	Part.No.
S-4	Open-Load	Silica	50µ	3.5g	3.5-525mg	15 (40)	200	20	HB0071
S-12	Open-Load	Silica	50µ	10g	10-1500mg	25 (60)	200	18	HB0072
S-25	Open-Load	Silica	50µ	20g	20-3000mg	25 (60)	200	12	HB0073
S-40	Open-Load	Silica	50µ	35g	35-5250mg	30 (70)	200	12	HB0074
S-80	Open-Load	Silica	50µ	70g	70-10500mg	50 (100)	200	10	HB0075
S-120	Open-Load	Silica	50µ	100g	0.100-15g	60 (150)	200	10	HB0076
S-220	Open-Load	Silica	50µ	185g	0.185-27.5g	120 (220)	150	6	HB0077
S-330	Open-Load	Silica	50µ	280g	0.280-42g	120 (220)	150	5	HB0078

Purezza® - Sphera^{Plus}

The **Purezza®-Sphera^{Plus} Cartridge** uses **High Capacity** and **Purity** Silica Gel with smaller particle size media (25µm). The high Surface Area combined with the small particle size provides better separation as well an increased sample loading capacity (up to 20% of their weight).

They are available in both **Standard** and **Open-Load** versions and compatible with most of the Flash Chromatography instruments available on the market. On Biotage systems we recommend the Open-Load version as the outlet Luer-Lok fitting eliminates the fluid connection leaking or coming off when there are instrument pressure pulses. The high pressure limits ensure they can be used with the newest Flash Chromatography systems on the market.

The **Purezza®-Sphera^{Plus} Cartridge** are best choice for very complex matrix purifications in your laboratory.

Purezza®-Sphera ^{Plus} - Specifications	
Packing	High Capacity Silica Gel
Particle Size	25µ SPHERICAL
Porosity	50Å
Surface Area	700 m ² /g
pH	6,5-7,0
USP Designation	L3



Purezza®-Sphera ^{Plus} Flash Cartridges - Silica - Standard Type									
Size	Type	Material	Particle Size	Packing Qty	Loading Capacity (0.1-20%)	Suggested Flow Rate (Max mL/min)	Max Pressure (psi)	Qty/Box	Part.No.
S-4	Standard	Silica	25µ	4g	4-800mg	15 (30)	300	20	HB0058
S-12	Standard	Silica	25µ	12g	12-2400mg	25 (50)	300	18	HB0059
S-25	Standard	Silica	25µ	25g	25-5000mg	25 (50)	300	12	HB0060
S-40	Standard	Silica	25µ	40g	40-8000mg	30 (60)	300	12	HB0061
S-80	Standard	Silica	25µ	80g	80-16000mg	50 (80)	200	10	HB0062
S-120	Standard	Silica	25µ	120g	0.120-24g	60 (100)	200	10	HB0063
S-220	Standard	Silica	25µ	220g	0.220-44g	80 (160)	150	6	HB0064
S-330	Standard	Silica	25µ	330g	0.330-66g	120 (160)	150	5	HB0065
S-800	Standard	Silica	25µ	800g	0.800-160g	105 (210)	100	1	HB0066
S-1600	Standard	Silica	25µ	1600g	1.6-320g	140 (350)	100	1	HB0067
S-3000	Standard	Silica	25µ	3000g	3-600g	175 (350)	100	1	HB0068

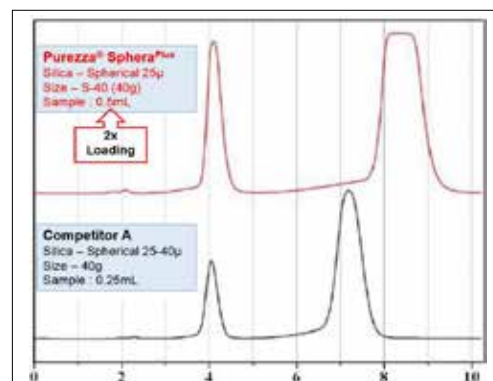
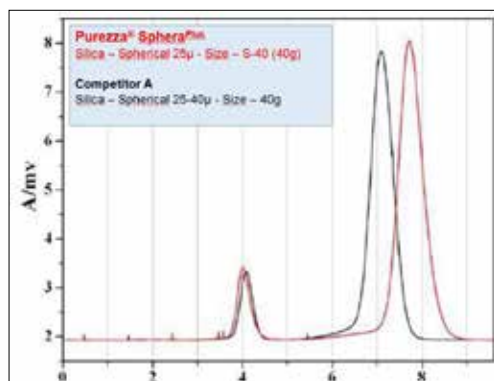
Comparison between Purezza®-Sphera^{Plus} and Competitor A

Smaller Particle Size and **High Surface Area** provide

- Better separations
- Higher loadability
- Improved Productivity

for your difficult samples.

Sample : Acetophenone & p-Methoxyacetophenone
Mobile Phase : Hexane/Ethylacetate 80/20
Sample : 0.5mL
Detector : UV 254nm



Purezza-Sphera ^{Plus} Flash Cartridges - Silica - Open-Load Type									
Size	Type	Material	Particle Size	Packing Qty	Loading Capacity (0.1-20%)	Suggested Flow Rate (Max mL/min)	Max Pressure (psi)	Qty/Box	Part.No.
S-4	Open-Load	Silica	25µ	3.5g	3.5-750mg	15 (30)	200	20	HB0079
S-12	Open-Load	Silica	25µ	10g	10-2000mg	25 (50)	200	18	HB0080
S-25	Open-Load	Silica	25µ	20g	20-4000mg	25 (50)	200	12	HB0081
S-40	Open-Load	Silica	25µ	35g	35-7500mg	30 (60)	200	12	HB0082
S-80	Open-Load	Silica	25µ	70g	70-14000mg	50 (80)	200	10	HB0083
S-120	Open-Load	Silica	25µ	100g	0.100-20g	60 (100)	200	10	HB0084
S-220	Open-Load	Silica	25µ	185g	0.185-37g	80 (160)	150	6	HB0085
S-330	Open-Load	Silica	25µ	280g	0.280-56g	100 (160)	150	5	HB0086

Purezza® - Sphera^{Star}

The **Purezza®-Sphera^{Star} Cartridge** uses **High Efficiency** and **Purity** Spherical Silica Gel with very small particle size (15µm). The high Surface Area combined with the small particle size provide a better separation as well as increased sample loading capacity (up to 30% of their weight).

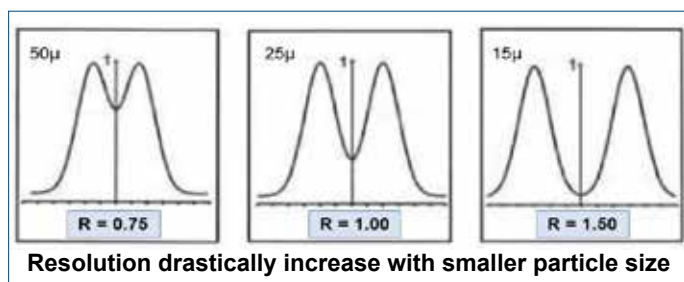
They are compatible with the newest Flash Chromatography instruments available on the market.

The **Purezza®-Sphera^{Star} Cartridges** are the best choice for **extremely** complex matrix purifications in your laboratory.

Purezza®-Sphera ^{Star} - Specifications	
Packing	High Efficiency Silica Gel
Particle Size	15µ SPHERICAL
Porosity	50Å
Surface Area	700 m ² /g
pH	6,5-7,5
USP Designation	L3



Purezza®-Sphera ^{Star} Flash Cartridges - Silica - Standard Type									
Size	Type	Material	Particle Size	Packing Qty	Loading Capacity (0.1-30%)	Suggested Flow Rate (Max mL/min)	Max Pressure (psi)	Qty/Box	Part.No.
S-4	Standard	Silica	15µ	4g	4-1200mg	15 (30)	300	20	HB0144
S-12	Standard	Silica	15µ	12g	12-3600mg	25 (50)	300	18	HB0145
S-25	Standard	Silica	15µ	25g	25-7500mg	25 (50)	300	12	HB0146
S-40	Standard	Silica	15µ	40g	40-12000mg	30 (60)	300	12	HB0147
S-80	Standard	Silica	15µ	80g	80-24000mg	50 (80)	200	10	HB0148
S-120	Standard	Silica	15µ	120g	0.120-36g	60 (100)	200	10	HB0149
S-220	Standard	Silica	15µ	220g	0.220-66g	80 (160)	150	6	HB0150
S-330	Standard	Silica	15µ	330g	0.330-99g	120 (160)	150	5	HB0151



Comparison between Purezza®-Sphera^{Star} and Competitor B

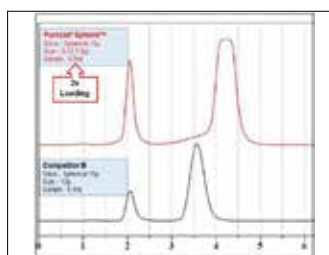
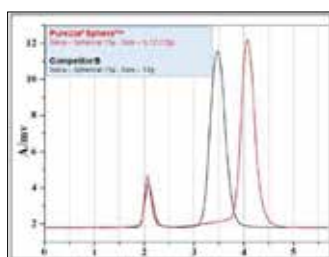
Smaller Particle Size

+

High Surface Area

=

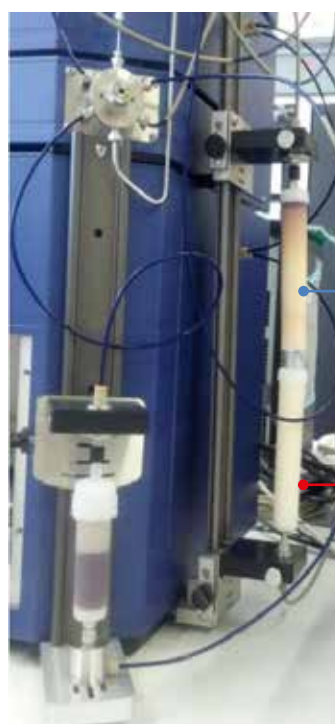
- Better separations
- Higher loadability
- Improved Productivity



Sample : Acetophenone & p-Methoxyacetophenone
 Mobile Phase : Hexane/Ethylacetate 80/20
 Sample : 0.2mL
 Detector : UV 254nm

How can I improve ?

- Loading Capacity
- Resolution
- Efficiency



If your Flash System can reach High-Pressure and High Flow-Rate then the **Stacking Column Option** is the Answer.

The TOP Cartridge packed with High-Capacity silica **Purezza® Sphera 50µm** increases sample loading and starts your initial purification

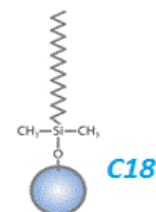
The BOTTOM Cartridge packed with High Efficiency silica **Purezza® Sphera^{Star} 15µm** improves resolution and completes your separation.

PuriFlash® systems reach up to **250 bar** pressure rate and **300mL** flow rate!

Purezza® - Reversed Phase Cartridges

Purezza®-Sphera ^{Plus} - C18 Specifications	
Packing	High Efficiency C18 Silica Gel
Particle Size	25µ SPHERICAL
Porosity	100Å
Surface Area	320 m ² /g
Carbon Load	17%
End Capping	Yes
USP Designation	L1

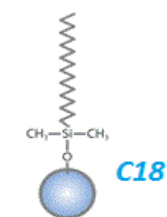
Purezza® - Sphera^{Plus}



Purezza®-Sphera ^{Plus} Flash Cartridges - C18 - Standard Type										
Size	Type	Material	Particle Size	Packing Qty	Loading Capacity (0.1-5%)	Suggested Flow Rate (Max mL/min)	Max Pressure (psi)	Qty/Box	Part.No.	
S-4	Standard	C18	25µ	5.4g	5.4-270mg	10 (20)	300	1	HB0098	
S-12	Standard	C18	25µ	20g	20-1000mg	15 (30)	300	1	HB0099	
S-25	Standard	C18	25µ	33g	33-1650mg	15 (30)	300	1	HB0100	
S-40	Standard	C18	25µ	48g	48-2400mg	20 (40)	300	1	HB0101	
S-80	Standard	C18	25µ	105g	105-5250mg	30 (60)	200	1	HB0102	
S-120	Standard	C18	25µ	155g	155-7750mg	40 (80)	200	1	HB0103	
S-220	Standard	C18	25µ	270g	0.27-13.5g	50 (100)	150	1	HB0104	
S-330	Standard	C18	25µ	420g	0.42-21.0g	50 (100)	150	1	HB0105	
S-800	Standard	C18	25µ	1080g	1.08-54.0g	70 (140)	100	1	HB0106	
S-1600	Standard	C18	25µ	2140g	2.14-107.0g	90 (180)	100	1	HB0107	
S-3000	Standard	C18	25µ	3830g	3.83-191.5g	110 (220)	100	1	HB0108	

Purezza®-Sphera ^{Star} - C18 Specifications	
Packing	High Efficiency C18 Silica Gel
Particle Size	15µ SPHERICAL
Porosity	100Å
Surface Area	320 m ² /g
Carbon Load	17%
End Capping	Yes
USP Designation	L1

Purezza® - Sphera^{Star}



Purezza®-Sphera ^{Star} Flash Cartridges - C18 - Standard Type										
Size	Type	Material	Particle Size	Packing Qty	Loading Capacity (0.1-8%)	Suggested Flow Rate (Max mL/min)	Max Pressure (psi)	Qty/Box	Part.No.	
S-4	Standard	C18	15µ	5.4g	5.4-432mg	10 (20)	300	1	HB0110	
S-12	Standard	C18	15µ	20g	20-1600mg	15 (30)	300	1	HB0111	
S-25	Standard	C18	15µ	33g	33-2640mg	15 (30)	300	1	HB0112	
S-40	Standard	C18	15µ	48g	48-3840mg	20 (40)	300	1	HB0131	
S-80	Standard	C18	15µ	105g	105-8400mg	30 (60)	200	1	HB0132	
S-120	Standard	C18	15µ	155g	155-12400mg	40 (80)	200	1	HB0133	
S-220	Standard	C18	15µ	260g	0.26-20.8g	50 (100)	150	1	HB0134	
S-330	Standard	C18	15µ	410g	0.41-32.8g	50 (100)	150	1	HB0135	
S-800	Standard	C18	15µ	1050g	1.05-84.0g	70 (140)	100	1	HB0136	
S-1600	Standard	C18	15µ	2090g	2.09-167.2g	90 (180)	100	1	HB0137	
S-3000	Standard	C18	15µ	3750g	3.75-300.0g	110 (220)	100	1	HB0139	

Purezza® - Other Phases

The **Purezza®** product line includes cartridges packed with a wide range of Bonded Phases in order to meet all of the purification challenges in your laboratory.

Purezza® Cartridges are available in both **Standard** and **Open-Load** formats and they are compatible with most Flash Chromatography instruments available on the market, including the newest.

Purezza® - Other Flash Cartridges Available								
Phase	Material Type			Porosity	Surface Area	Particle Size	Loading Capacity	Size
C18-AQ	Silica	High Efficiency	Spherical	100Å	320m ² /g	25µ	0.1-2%	S-4 to S-330
C18-AQ	Silica	High Efficiency	Spherical	100Å	320m ² /g	50µ	0.1-2%	S-4 to S-330
C8	Silica	High Efficiency	Spherical	100Å	320m ² /g	25µ	0.1-2%	S-4 to S-330
C8	Silica	High Quality	Spherical	100Å	300m ² /g	50µ	0.1-2%	S-4 to S-330
CN	Silica	High Efficiency	Spherical	100Å	320m ² /g	25µ	0.1-2%	S-4 to S-330
C4	Silica	High Efficiency	Spherical	100Å	320m ² /g	25µ	0.1-2%	S-4 to S-330
DIOL	Silica	High Efficiency	Spherical	100Å	320m ² /g	25µ	0.1-2%	S-4 to S-330
DIOL	Silica	High Capacity	Spherical	50Å	700m ² /g	25µ	0.1-4%	S-4 to S-330
DIOL	Silica	Ultra Pure	Spherical	100Å	300m ² /g	50µ	0.1-2%	S-4 to S-330
DIOL	Silica	Ultra Pure	Irregular	60Å	500m ² /g	50µ	0.1-2%	S-4 to S-330
NH2	Silica	High Capacity	Spherical	50Å	700m ² /g	25µ	0.1-4%	S-4 to S-330
NH2	Silica	Ultra Pure	Irregular	60Å	500m ² /g	50µ	0.1-2%	S-4 to S-330
SAX	Silica	Ultra Pure	Irregular	60Å	500m ² /g	50µ	≤0.26 meq/g	S-4 to S-330
SCX	Silica	Ultra Pure	Irregular	60Å	500m ² /g	50µ	≤0.34 meq/g	S-4 to S-330
HILIC	Silica	High Efficiency	Spherical	100Å	320m ² /g	25µ	0.1-2%	S-4 to S-330
Alumina-N	Alumina	High Quality	Neutral	55Å	155m ² /g	50-75µ	0.1-4%	S-4 to S-330
Alumina-A	Alumina	High Quality	Acid	55Å	155m ² /g	50-75µ	0.1-4%	S-4 to S-330
Alumina-B	Alumina	High Quality	Basic	55Å	155m ² /g	50-75µ	0.1-4%	S-4 to S-330

If your purification then needs to use a packing material not listed in the above table, please contact us,

and we will make your Flash Cartridge for you !



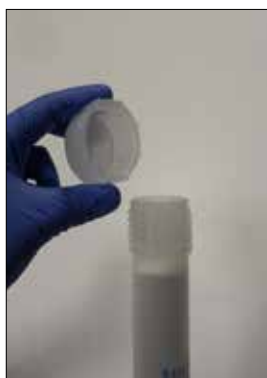
Easy Injection of Oily and Sticky Samples with Open-Load Flash Cartridges.

The injection of oily and sticky mixtures, which often happens in Reverse Phase applications, can be difficult when using the injection valve of the Flash Instrument.

The **Purezza® Open-Load** format has 15% volume available at the top of the Cartridges. This allows the user to load liquid samples directly onto the cartridge, after a conditioning step, and avoids high pressure manual injection of oily & sticky samples.

Using the **Purezza® Open-Load Cartridge** format this operation is very fast and very easy; here are the 4 simple steps to follow :

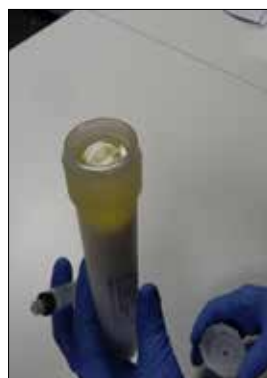
Step 1
Open your Cartridge



Step 2
Load your Oily & Sticky Sample using a Syringe



Step 3
Your Sample is Loaded on Top of the Cartridge



Step 4
Close the Cartridge and Connect it to the Flash Instrument !



puriFlash® - Cartridges

The Interchim **puriFlash®** product line offers more than 50 different silica based media selectivities.

puriFlash® sorbents take advantage of ultra pure spherical silica, which achieves greater reproducibility, and establishes optimized sample recoveries.



They are compatible with most Flash Chromatography instruments available on the market.



Code	F0001	F0004	F0012	F0025	F0040	F0080	F0120	F0220	F0330	F0800	F1600
Ø int. (mm)	9	12	21	21	27	31	36	60	60	78	104
L (mm)	26	68	84	133	135	205	224	153	226	341	385
CV _n (mL)	1.2	5	19	32	48	102	153	269	405	1 078	2 170
Flowrate - Typical (mL/min)	2.5	5	15	15	26	34	46	127	127	216	383
Flowrate - Range (mL/min)	1 - 10	5 - 20	15 - 50	15 - 50	20 - 70	30 - 100	40 - 150	80 - 300	80 - 300	150 - 300	200 - 500

puriFlash® Packings in Flash Cartridges

Type	Material	Pore Size	Surface Area	Particle Size	Type	Material	Pore Size	Surface Area	Particle Size
Silica STD	Irregular Silica	60Å - 450m ² /g		15µ & 50µ	NH2	Pure Silica	100Å - 300m ² /g		15µ, 30µ & 50µ
Silica HC	High Capacity Silica	60Å - 680m ² /g		15µ, 25µ & 50µ	NH2 HC	High Capacity Silica	60Å - 680m ² /g		50µ
Silica HP	High Performance Silica	60Å - 500m ² /g		15µ, 30µ & 50µ	SCX	Pure Silica	100Å - 400m ² /g		50µ
Diol	Pure Silica	60Å - 500m ² /g		15µ, 30µ & 50µ	SAX	Pure Silica	60Å - 500m ² /g		50µ
Cyano	Pure Silica	60Å - 500m ² /g		15µ & 50µ	X	PSDVB	100Å - 800m ² /g		40µ
MM1 Alkyl Chain/ SAX	Pure Silica	100Å - 400m ² /g		50µ	P6	Polyamide 6	60Å		100µ
RP-AQ	Pure Silica	60Å - 500m ² /g		15µ & 30µ	Alumine N	Neutral Alumina	60Å - 200m ² /g		32/63µ
C18-AQ	Pure Silica	100Å - 300m ² /g		15µ & 30µ	Alumine B	Basic Alumina	60Å - 200m ² /g		32/63µ
C18-STD	Irregular Silica	60Å - 450m ² /g		50µ	Chiral IA	Spherical Silica IA Amylose Tris			20µ
C18-HP	Pure Silica	100Å - 300m ² /g		15µ, 30µ & 50µ	Chiral IC	Spherical Silica IC Cellulose Tris			20µ
C18-XS	Pure Silica	100Å - 300m ² /g		15µ & 30µ	Chiral ID	Spherical Silica ID Amylose Tris			20µ
C18-HQ	High Quality Silica	100Å - 425m ² /g		15µ	Chiral OD-I	Spherical Silica OD-I Cellulose Tris			20µ
PHC4 Phenyl/Butyl	Ultra Pure Silica	100Å - 300m ² /g		15µ	Activated Carbon				
HILIC-HIA	Ultra Pure Silica	100Å - 300m ² /g		15µ					
Silica HP AGNO ₃	Pure Silica	60Å - 500m ² /g		50µ					

Purezza® - ESL Empty Solid Loader

The **Purezza® - ESL Empty Solid Loader** hardware is made with a Pharmaceutical grade Polypropylene material to ensure virtually zero cross contamination and it is ideal for reliable and reproducible purification.

They are compatible with most Flash Chromatography instruments available on the market. The high pressure limits ensure they can be used with the newest Flash Chromatography systems on the market.

The **Purezza® - ESL Empty Solid Loader** can be used for two main purposes :

- 1 - when you need to prepare your Solid Sample for Solid Injection mode
- 2 - when you want to pack your own Flash Cartridges with your selected media

Purezza® - ESL Empty Solid Loader					
Size	Type	Volume (mL)	Max Pressure (psi)	Qty/Box	Part.No.
S-4	ESL Empty Solid Loader 4g	8	200	10	HE0001
S-12	ESL Empty Solid Loader 12g	27	200	10	HE0002
S-25	ESL Empty Solid Loader 25g	46	200	10	HE0003
S-40	ESL Empty Solid Loader 40g	70	200	10	HE0004
S-80	ESL Empty Solid Loader 80g	147	200	5	HE0006
S-120	ESL Empty Solid Loader 120g	215	150	5	HE0008
S-220	ESL Empty Solid Loader 220g	377	150	5	HE0009
S-330	ESL Empty Solid Loader 330g	539	100	5	HE0010



Top Frits for Purezza® ESL Empty Solid Loader				
Size	Description	Porosity	Qty/Box	Part.No.
S-4	Top Frit for 4g ESL Empty Solid Loader	16-20µ	10	HE0011
S-12	Top Frit for 12g ESL Empty Solid Loader	16-20µ	10	HE0012
S-25	Top Frit for 25g ESL Empty Solid Loader	16-20µ	10	HE0013
S-40	Top Frit for 40g ESL Empty Solid Loader	16-20µ	10	HE0014
S-80	Top Frit for 80g ESL Empty Solid Loader	20-25µ	10	HE0015
S-120	Top Frit for 120g ESL Empty Solid Loader	20-25µ	5	HE0026
S-220	Top Frit for 220g ESL Empty Solid Loader	20-25µ	5	HE0016
S-330	Top Frit for 330g ESL Empty Solid Loader	20-25µ	5	HE0017



Flash Chromatography Accessories

A complete range of accessories you need for your daily separation completes the **Purezza®** product line.

Accessories		
Description	Qty/Box	Part.No.
Frit Inserter for size S-4 Purezza® Cartridge - Standard - Open-Load and ESL Empty Solid Loader	1	HE0018
Frit Inserter for size S-12 / S-25 & S-40 Cartridge - Standard - Open-Load and ESL Empty Solid	1	HE0019
Frit Inserter for size S-80 & S-120 Cartridge - Standard - Open-Load and ESL Empty Solid Loader	1	HE0020
Frit Inserter for size S-220 & S-330 Cartridge - Standard - Open-Load and ESL Empty Solid	1	HE0021
Luer connector kit for S-800 - S-1600 & S-3000 Cartridges	1	HE0022
Flagless Nut for 1/8" Tubing (Max Pressure 1000psi)	10	HE0023
Flangless Ferrule for 1/8" Tubing (Max Pressure 1000psi)	10	HE0024
Teflon 1/8" Tubing	3mt	HE0025



Davisil® - Silica Gel for Flash Chromatography

SepaChrom offer the complete **Davisil®** product line from **W.R.Grace & Co - Conn**, one of the world's largest manufacturer of specialty silica gel used in many applications, including Laboratory and Industrial scale Purification.

Here are the 5 most important reasons why **Davisil®** is the best choice for all these applications :



**FLASH
CHROMATOGRAPHY**



**ORGANIC SYNTHESIS
CLEAN-UP**



**NATURAL PRODUCTS
PURIFICATION**



**PREPARATIVE
CHROMATOGRAPHY**

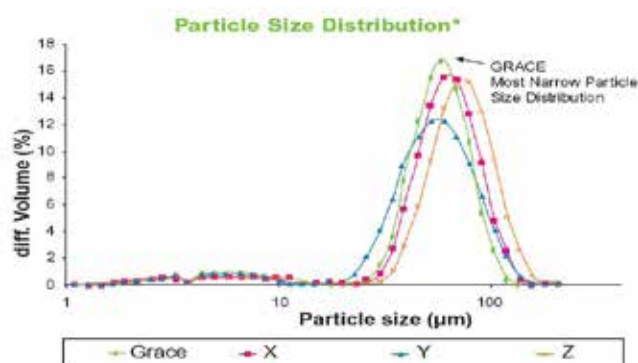
1 - Improved Performance

Davisil® silica's chemical and structural properties are optimized for chromatographic performance. Tight control of these properties from raw material to finished product in addition to real time monitoring of production processes distinguishes Davisil® silica and ensures consistent performance.

High surface area increases loading capacity and High purity silica reduces unwanted and unpredictable interactions that cause contamination and poor reproducibility.

Davisil® and other Silica Gels for Chromatography Comparison.

Brand	Surface Area	Bulk Density	Surface Area of 1L Column	Mg	Ca
Grace	550m ² /g	420g/L	231,000m ² /L	25ppm	19ppm
X	515m ² /g	430g/L	221,450m ² /L	27ppm	207ppm
Y	460m ² /g	430g/L	197,800m ² /L	119ppm	793ppm
Z	450m ² /g	450g/L	189,000m ² /L	212ppm	1775ppm



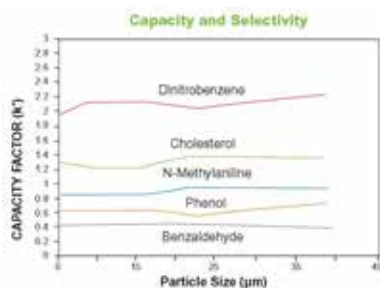
Tight particle size distribution optimizes efficiency and pressure drop in packed columns.

*All comparative data generated on chromatographic silica labeled 60Å, 40-63µm.

2 - Predictable Scale-Up

Hundreds of tons of Davisil® chromatographic silica are manufactured per year in multi-ton lots. Our manufacturing is at scale, so you can be confident that Davisil® silica will yield consistent chromatographic performance as particle size and volume are increased.

Uniform capacity (k') and selectivity (k') factors across all particle sizes for predictable and reliable scale-up



4 - Greater Selection

A wide range of Davisil® silica grades are available in both Normal and Bonded Phase : **C18, Amino, Diol & Cyano** are available for a wide choice of selectivity.

Davisil® silica offers the wide range of **Porosity** available on the market (30Å to 4500Å) to achieve purification of Molecules with a large range of **Molecular Weight**.

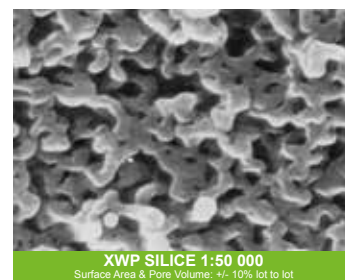
Davisil® is available in **1kg & 5kg** for laboratory application as well in **Multi-Ton quantities** for industrial purification.

SepaChrom not only offers media for process purification but also column hardware, packing equipment, and process HPLC systems for optimized chromatographic performance.

3 - Exceptional Product Reliability

Manufactured for over 25 years, Davisil® chromatographic silica is one of the world's most widely used chromatography sorbents.

Davisil® silica is produced at two ISO-9001 certified facilities under strict QC controls from raw material to finished product. Each step in the production process is closely monitored to proactively eliminate discrepancies and better ensure high lot-to-lot finished product reproducibility and tightly controlled specifications.



5 - Unmatched Technical Support

W.R.Grace & Co.Conn is a company founded in 1854. High quality, innovative products and complete technical support to the users are the main reason of the company success.

SepaChrom is an Italian company specialized in manufacturing and commercialization of product for **Chromatography**.

Together, **SepaChrom** and **Grace** are committed to offer technical assistance, laboratory trials, column packing services and recommend purification solution for **Flash, Prep and Process-scale Chromatography**.

Our goal is to help the users of Chromatographic techniques to optimize the performance during their daily purification **challenges**

Davisil® - 3 Steps for the best choice

Step 1 - Select **Pore Size** of media based on the **Molecular Weight** of molecule to be purified

MW of Molecule	Porosity (Å) *
<350 MW	35Å
<800 MW	60Å
<15000 MW	150Å
<100000 MW	250Å
<250000 MW	500Å
>250000 MW	1000Å-4500Å

Step 2 - Select **Particle Size** based on scale and system pressure.

Pressure	Particle Size (µm)
65 bar	10 µm
20 bar	16-24 µm
15 bar	20-45 µm
5 bar	40-63 µm
2 bar	70-200 µm
<1 bar	>200 µm

Step 3 - Determine **Surface Functionality** based on sample solubility and separation goals.

Solubility	Functionality
Non Aqueous (NP)	Silica
Aqueous or Non Aqueous (NP, RP, HILIC)	Cyano Diol Amino
Aqueous (RP)	C18

* Consideration of compounds being separated and bonded phase should be made when selecting the right pore size.

Davisil® - Silica Gel - Unbonded

- Davisil® - Silica Gel unbonded for Preparative Chromatography, Flash Chromatography and for Industrial Scale Purification.



Porosity (Å)	Particle Size (µm)	Description	Packaging (kg)	Stock N#	Applications
60Å	10-14 µm	Davisil® - Grade 710NW	20kg	FA0017	Preparative LC
60Å	40-63 µm	Davisil® - LC60A - 40-63	1kg	FA0044	Flash Chromatography - Laboratory Scale
60Å	40-63 µm	Davisil® - LC60A - 40-63	5kg	FA0045	Flash Chromatography - Laboratory Scale
60Å	40-63 µm	Davisil® - LC60A - 40-63	25kg	FA0032	Flash Chromatography - Industrial Scale
60Å	30-200 µm	Davisil® - LC60A - 30-200	1kg	FA0048	Laboratory Scale-Up
60Å	30-200 µm	Davisil® - LC60A - 30-200	5kg	FA0049	Small Purification - Laboratory Scale
60Å	30-200 µm	Davisil® - LC60A - 30-200	25kg	FA0026	Industrial Scale Purification
60Å	70-200 µm	Davisil® - LC60A - 70-200	1kg	FA0046	Laboratory Scale-Up
60Å	70-200 µm	Davisil® - LC60A - 70-200	5kg	FA0047	Small Purification - Laboratory Scale
60Å	70-200 µm	Davisil® - LC60A - 70-200	25kg	FA0037	Industrial Scale Purification

Davisil® - Silica Gel - Bonded

- Davisil® - Functionalized Silica Gel for Preparative Chromatography, Flash Chromatography and for Industrial Scale Purification

Functionalization	Porosity (Å)	Particle Size (µm)	Description	Packaging (kg)	Stock N#	Applications
C18	60Å	10-14 µm	Davisil® - 710NC18E	250g	FA0043	Preparative LC Column Chromatography Flash Chromatography SPE (Solid Phase Extraction)
C18	60Å	10-14 µm	Davisil® - 710NC18E	1kg	FA0018	
C18	60Å	35-70 µm	Davisil® - 633NC18E	250g	FA0042	
C18	60Å	35-70 µm	Davisil® - 633NC18E	1kg	FA0030	
Cyano	60Å	10-14 µm	Davisil® - 710NCNE	250g	FA0050	
Cyano	60Å	10-14 µm	Davisil® - 710NCNE	1kg	FA0021	
Cyano	60Å	35-70 µm	Davisil® - 633NCNE	250g	FA0051	
Cyano	60Å	35-70 µm	Davisil® - 633NCNE	1kg	FA0028	
Diol	60Å	10-14 µm	Davisil® - 710N2OH	250g	FA0052	
Diol	60Å	10-14 µm	Davisil® - 710N2OH	1kg	FA0019	
Diol	60Å	35-70 µm	Davisil® - 633N2OH	250g	FA0053	
Diol	60Å	35-70 µm	Davisil® - 633N2OH	1kg	FA0027	
Amino	60Å	10-14 µm	Davisil® - 710NNH2	250g	FA0054	
Amino	60Å	10-14 µm	Davisil® - 710NNH2	1kg	FA0020	
Amino	60Å	35-70 µm	Davisil® - 633NNH2	250g	FA0055	
Amino	60Å	35-70 µm	Davisil® - 633NNH2	1kg	FA0029	

Sepa-Bulk - Silica Gel for Chromatography

SepaChrom offers a complete line of **100Å Spherical Silica Gel** media used in many applications, including **Laboratory and Industrial scale Purification**.

Sepa-Bulk is available in a wide range of **Particle Sizes** :

- 10µ & 15µ for Preparative HPLC,
- 20-45µ for Preparative LC
- 40-75µ for Flash Chromatography
- 75-200µ for Industrial Scale Purification.

To complete the product line **Sepa-Bulk** is available with a wide range of **Porosity**, including 70Å, 150Å, 200Å, 300Å, 500Å, 800Å and 1000Å.



Functionalization	Porosity (Å)	Particle Size (µm)	Description	Packaging (kg)	Stock N#	Applications
Silica	100Å	10 µm	Sepa-Bulk Silica	1kg	FF0001	Preparative Chromatography
Silica	100Å	15 µm	Sepa-Bulk Silica	1kg	FF0002	
Silica	100Å	20-45 µm	Sepa-Bulk Silica	1kg	FF0003	
Silica	100Å	20-45 µm	Sepa-Bulk Silica	10kg	FF0004	Preparative & Flash Chromatography
Silica	100Å	20-45 µm	Sepa-Bulk Silica	20kg	FF0005	
Silica	100Å	40-75 µm	Sepa-Bulk Silica	1kg	FF0006	Flash Chromatography
Silica	100Å	40-75 µm	Sepa-Bulk Silica	10kg	FF0007	
Silica	100Å	40-75 µm	Sepa-Bulk Silica	20kg	FF0008	
Silica	100Å	75-200 µm	Sepa-Bulk Silica	1kg	FF0009	Industrial Scale Purification
Silica	100Å	75-200 µm	Sepa-Bulk Silica	10kg	FF0010	
Silica	100Å	75-200 µm	Sepa-Bulk Silica	20kg	FF0011	
C18	100Å	10 µm	Sepa-Bulk C18	250g	FF0012	Preparative Chromatography
C18	100Å	10 µm	Sepa-Bulk C18	1kg	FF0013	
C18	100Å	15 µm	Sepa-Bulk C18	250g	FF0014	
C18	100Å	15 µm	Sepa-Bulk C18	1kg	FF0015	Preparative & Flash Chromatography
C18	100Å	20-45 µm	Sepa-Bulk C18	1kg	FF0022	
C18	100Å	20-45 µm	Sepa-Bulk C18	10kg	FF0016	
C18	100Å	40-75 µm	Sepa-Bulk C18	1kg	FF0017	Flash Chromatography
C18	100Å	40-75 µm	Sepa-Bulk C18	10kg	FF0018	
C18	100Å	75-200 µm	Sepa-Bulk C18	1kg	FF0019	Industrial Scale Purification
C18	100Å	75-200 µm	Sepa-Bulk C18	10kg	FF0020	
C18	100Å	75-200 µm	Sepa-Bulk C18	20kg	FF0021	

Sepa-Bulk product lines include a wide range of **bonded media** to meet any purification challenge from **Laboratory to Industrial** scale. Packaging is available from 100g to multi-ton for laboratory to process scale applications.

Packing	Porosity	Particle Size
C18	70Å-150Å-200Å-300Å-500Å-800Å-1000Å	10µ - 15µ - 20/45µ - 40/75µ - 75/200µ
Silica	70Å-150Å-200Å-300Å-500Å-800Å-1000Å	10µ - 15µ - 20/45µ - 40/75µ - 75/200µ
C8	70Å-100Å-150Å-200Å-300Å-500Å-800Å-1000Å	10µ - 15µ - 20/45µ - 40/75µ - 75/200µ
PHENYL	70Å-100Å-150Å-200Å-300Å-500Å-800Å-1000Å	10µ - 15µ - 20/45µ - 40/75µ - 75/200µ
PEI	70Å-100Å-150Å-200Å-300Å-500Å-800Å-1000Å	10µ - 15µ - 20/45µ - 40/75µ - 75/200µ
COOH	70Å-100Å-150Å-200Å-300Å-500Å-800Å-1000Å	10µ - 15µ - 20/45µ - 40/75µ - 75/200µ
SO3H	70Å-100Å-150Å-200Å-300Å-500Å-800Å-1000Å	10µ - 15µ - 20/45µ - 40/75µ - 75/200µ
DIOL	70Å-100Å-150Å-200Å-300Å-500Å-800Å-1000Å	10µ - 15µ - 20/45µ - 40/75µ - 75/200µ
CN	70Å-100Å-150Å-200Å-300Å-500Å-800Å-1000Å	10µ - 15µ - 20/45µ - 40/75µ - 75/200µ
NH2	70Å-100Å-150Å-200Å-300Å-500Å-800Å-1000Å	10µ - 15µ - 20/45µ - 40/75µ - 75/200µ
DNH	70Å-100Å-150Å-200Å-300Å-500Å-800Å-1000Å	10µ - 15µ - 20/45µ - 40/75µ - 75/200µ
HILIC	70Å-100Å-150Å-200Å-300Å-500Å-800Å-1000Å	10µ - 15µ - 20/45µ - 40/75µ - 75/200µ

Are you looking for a **Preparative or Process Scale Column or Chromatographic System?**

SepaChrom offers a complete line of Stainless Steel Low-Medium & High Pressure columns (up to 2m ID - 100bar) and systems (up to 5000 l/hr flow rate) for **Laboratory and Industrial scale Purification**.

Contact our office for more details



VYdamas - Silica Gel for Large Molecule Purification

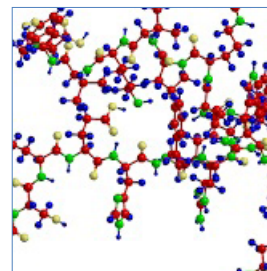
Analysis and Purification of large molecules such as **Proteins and Peptides** needs a wide pore size media.

SepaChrom offers a complete line of **Reverse Phase 300Å Spherical Silica Gel** media for **Laboratory and Industrial scale Purification**.

VYdamas is based on High Purity Silica Base media; the low metal content ensures optimal performance in the purification of Proteins and Peptides.

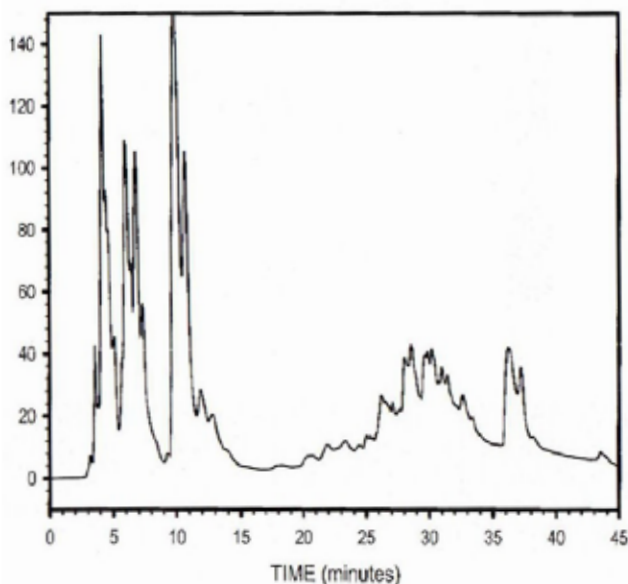
VYdamas is available in C4, C8 and C18 Bonded media.

Flash Cartridges packed with **VYdamas** media are also available, please contact our office for a quote.



Type	Porosity (Å)	Silica	Particle Size (µm)	% Carbon Load	Description	Packaging (kg)	Stock N#	Applications
C4	300Å	Spherical	10 µm	2.5	VYdamas C4	250g	VY0001	Preparative Chromatography
C4	300Å	Spherical	10 µm	2.5	VYdamas C4	1kg	VY0002	
C4	300Å	Spherical	15 µm	2.5	VYdamas C4	250g	VY0003	
C4	300Å	Spherical	15 µm	2.5	VYdamas C4	1kg	VY0004	
C4	300Å	Spherical	20-45 µm	2.5	VYdamas C4	1kg	VY0005	Preparative & Flash Chromatography
C4	300Å	Spherical	40-75 µm	2.5	VYdamas C4	1kg	VY0006	Flash Chromatography
C8	300Å	Spherical	10 µm	4.0	VYdamas C8	250g	VY0007	Preparative Chromatography
C8	300Å	Spherical	10 µm	4.0	VYdamas C8	1kg	VY0008	
C8	300Å	Spherical	15 µm	4.0	VYdamas C8	250g	VY0009	
C8	300Å	Spherical	15 µm	4.0	VYdamas C8	1kg	VY0010	
C8	300Å	Spherical	20-45 µm	4.0	VYdamas C8	1kg	VY0011	Preparative & Flash Chromatography
C8	300Å	Spherical	40-75 µm	4.0	VYdamas C8	1kg	VY0012	Flash Chromatography
C18	300Å	Spherical	10 µm	7.0	VYdamas C18	250g	VY0013	Preparative Chromatography
C18	300Å	Spherical	10 µm	7.0	VYdamas C18	1kg	VY0014	
C18	300Å	Spherical	15 µm	7.0	VYdamas C18	250g	VY0015	
C18	300Å	Spherical	15 µm	7.0	VYdamas C18	1kg	VY0016	
C18	300Å	Spherical	20-45 µm	7.0	VYdamas C18	1kg	VY0017	Preparative & Flash Chromatography
C18	300Å	Spherical	40-75 µm	7.0	VYdamas C18	1kg	VY0018	Flash Chromatography

Purification of Peptides from a Peptone



Operating conditions :

Column : VYdamas C18 HPLC column - 5 µm - 4.6 mmID x 250 mm).
 Mobile Phase : A: 1% TFA in water
 B: 1% TFA in acetonitrile
 Gradient : 100% A for 15 min., 0-22% B in 21 min., hold 22% B for 6 min., 100% A for 25 min.
 Flow Rate : 1.0 mL/min.
 Detector : UV at 254 nm.
 Temperature : 30°C.

Scale-Up to Preparative HPLC

The process of Scaling-Up from **analytical to larger scale** separation can best be described as a balancing act. The user has to optimize purification conditions such as column size, media type, solvent use, loadability and yield.



Linear velocity is the key parameter when scaling up. By maintaining constant linear velocity, the retention times of the various fractions will be similar for different column ID's. The formula below can be used to maintain constant linear velocity when scaling up **from a smaller (ID-small) to larger column (ID-large)** of the same column length.

$$F\text{-large} = F\text{-small} \times (ID\text{-large} / ID\text{-small})^2$$

F-large = flow rate of the larger column
 F-small = flow rate of the smaller column
 ID-large = inner diameter of the larger column
 ID-small = inner diameter of the smaller column

To convert volumetric flow rates (mL/min) to linear flow rates (cm/hour) use the following formula:

$$\text{Linear (Y) to Volumetric (X) flow rate : } X = \frac{Y}{60} \pi \frac{ID^2}{4}$$

$$\text{Volumetric (X) to Linear (Y) flow rate : } Y = 60X \frac{4}{\pi ID^2}$$

X = volumetric flow rate in mL/min
 Y = linear flow rate in cm/h
 ID = column inner diameter in cm

Table : Scale-Up

Column	ID	Load	Flow Rate
Analytical	4.6mm	X	1.0 mL/min
Semi-Prep	21.2mm	20X	18.9 mL/min
Prep	50mm	120X	118.0 mL/min
Process	100mm	500X	472.6 mL/min

Other Products available from SepaChrom




HPLC

HPLC, UHPLC Silica Based Columns for Analytical Applications
 Vydac® - VYdamas® Columns for Proteins and Peptides Separations.
 Polymer Base Columns for Carbohydrate & Organic Acids Analysis
 Chiral HPLC Columns
 Ion Chromatography Columns for Anions and Cations Analysis




MEDIA

Irregular and Spherical Silica Gel for Flash, Prep & Industrial Purification
 Bonded Silica C18, Cyano, Diol, Amino
 Wide Range Porosity (30Å- 2500Å) and Particle Size (10µ-200µ) for Any Application
 Polymer Based Resin for Reversed Phase and Ion Exchange Chromatography



PREP

10mm-50mmID Packed Prep Columns for Lab Scale Purification
 25mm-100mmID Packed & Empty, Flanged & Spring Column Technology
 Up to 2000mmID Process Scale Chromatography Columns & Systems, Flanged & DAC Technology
 Scale-up Method Development & Packing Service



FLASH

Instruments for Flash and Prep Chromatography up to 750mL/min & 400 bar Pressure.
 00-800 Multi Wavelength & Scan Collection, Integrated ELSD, MS Simple Quad Detector
 Flash Columns for All Existing Flash Instruments : Silica, Reverse Phase, CN, Diol, NH₂, Chiral Phases, 15µ to 50µ Particle Size




SPE

Silica Based SPE Cartridges for Pharma, Environmental, Food&Beverage Applications.
 Polymer Base SPE Cartridges for Clinical & Forensic Applications.
 Ion Chromatography SPE Cartridges
 Accessories for SPE
 Syringe Filters & QuEChERS



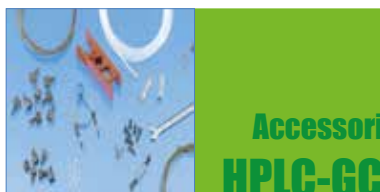
VIALS

Autosampler Vials for HPLC, IC e GC
 Sampling Vials
 Head Space Vials
 Crimper & Decapper and Sampling Accessories



GC

High Performance GC Capillary Column :
 MEGA : Full Range of GC Capillary Columns, MS Columns, DEX Chiral, MEGA-HT, FastGC, MEGA 2D Columns
 Heliflex® & Econo-Cap™ GC Capillary Column



Accessori HPLC-GC

SS & PEEK Tubing for Analytical, Preparative and Ion Chromatography
 Fittings, Ferrule & Valves for HPLC, IC and GC
 Syringes and Septa for GC
 Traps for GC Gas Lines
 Gas Generators

Company Profile

About us :

SepaChrom is a new company specialising in **Chromatography**. **SepaChrom** is the brainchild of the founders who wanted to create a dedicated and unique company able to support **Chromatography Users** in optimizing their challenges.

Our Core competence is the manufacture, sale and support of **High-Quality** products for **GC, Analytical and Preparative** scale **HPLC** and **Flash** purification, including consumables and accessories, through **Process** scale purification.

Our Mission :

Our team has decades of experience, which, combined with a range of High Quality selected products and the most efficient technological solutions, allows **SepaChrom** to support Pharma, Biotech, Chemical, Food and Beverage, Cosmetic, Environmental, Clinical and Petrochemical industries, in R&D departments as well in QC laboratories and Production. Our commitment is to provide the Highest level of Technical Support that Chromatographers expect from **Your Specialist in Chromatography**

Customers in Mind :

The success of **SepaChrom** is driven by complete **satisfaction** of our customers, and consequently by their success.

SepaChrom's expertise results in High-Quality **pre & post** sale support to the Chromatographic Users. This includes **fast delivery** of your products from our warehouse to your location.



Sepachrom Srl
 Via Trento 33
 20017 RHO MI - Italy

T.: +39 02 365 41 401
 F.: +39 02 365 48 378
 E.: info@sepachrom.com
 W.: www.sepachrom.com