

# THE ESSENTIAL SYSTEMS & CONSUMABLES FOR HIGH PERFORMANCE LC PURIFICATION & MASS SPECTROMETRY

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# TWO COMPANIES, ONE GOAL BEST-IN-CLASS SOLUTIONS FOR SCIENTISTS



Dear Customers,

Sharing a customer-focused company vision, a taste for excellence with state-of-the-art product solutions and working hand in hand for eight years, it was natural that **Advion**<sup>®</sup>, a well known player in the world of mass spectrometry and chromatography products, and **Interchim**<sup>®</sup>, a global provider of instrumentation and consumables for life sciences, research and industry would strengthen their ties to accompany their customers and partners even further.

We are happy to introduce you the new **Advion Interchim Scientific**, we manufacture and deliver tailored solutions to improve our customers' most challenging identification, quantification, and purification needs with our broad range of innovative instruments, consumables, reagents, and scientific expertise.

Our unrivaled portfolio ranges from media and columns to consumables, accessories and instruments for flash chromatography, preparative (U)HPLC, analytical (U)HPLC, mass spectrometry, ICP-MS, coupled with intelligent apps and software.

You can find all our products on our websites [advion-interchim.com](http://advion-interchim.com), [flash-chromatography.com](http://flash-chromatography.com) as well as our application notes and tips and tricks in our blog articles. Both technical and support services from **Interchim**<sup>®</sup> and **Advion**<sup>®</sup> remain at your disposal to help you overcome your challenges and to choose the most appropriate product solutions.

Strategically aligned for global growth, we recognize that our success has always come from our customers, and we are dedicated and committed to providing best-in-class service and support worldwide.

From our respective headquarters in France and the United States, our subsidiaries, and our independent distributors network, we thank you for your confidence and we are proud to accompany you in the success of your projects.

Advion Interchim Scientific

**Get a LC purification platform as unique as your work!**

Customize the puriFlash® 360° for your lab's specific needs.

**Key features:**

- Simplicity: powerful, easy-to-use features.
- Technology concentrated in a small package to improve the chemist's workflow.
- Easy accessibility of multi-profile users with minimum training thanks to InterSoft®X software.

**Low to high pressure LC purification of small & large molecules with 3X detection UV, ELSD & MS**

The puriFlash® 360° LC Purification Platform combines simplicity & best-in-class design to make chemists purifications by liquid chromatography easier, intuitive and productive. No matter your level of expertise, the platform controlled by InterSoft®X, with Genius our embedded artificial intelligence, allows routine to sophisticated RP purification of small organics, natural products, peptides and proteins.

Stay focused on your job with the peace of mind that you will have the best purification possible.

There is no risk of product loss with full system sensor monitoring, overpressure management and pauses. Confidently run the platform 24/7 with minimum after-sales service required.

Small but mighty, the puriFlash® XS 520 Plus offers 300 mL/min @ up to 20 bar specifications. It is the ideal entry-level system for routine NP purification of small organics. For larger-scale purification, the puriFlash® 5.250 offers up to 250 bar with second dimension to enlarge the separation potential and safely isolate high value compounds.



# OUR CONSUMABLES SOLUTIONS

 **Advion Interchim**  
scientific®

## Consumables

Sample Preparation  
Vials, Syringe Filter,  
SPE columns



 **Advion Interchim**  
scientific®

## puriFlash® (U)HPLC

(U)HPLC columns for the quantification  
and purification of small molecules and peptides  
to proteins.



 **Advion Interchim**  
scientific®

## puriFlash® LC

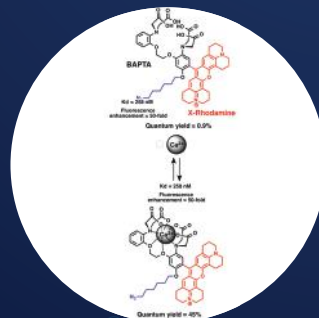
Flash and prep columns  
for purification



 **FluoProbes®**

## CaRuby-nano

New red fluorescent calcium indicator activated  
for click chemistry.



# OUR INSTRUMENTS SOLUTIONS



**Advion Interchim**  
scientific®

**TLC-FlashReader™**

New multi-function TLC plate reader.

**Advion Interchim**  
scientific®

**puriFlash® XS-Vap**

Multi-position evaporator  
under gas flow.



**Advion Interchim**  
scientific®

**puriFlash® XS 520 Plus - puriFlash® 5250**

Our puriFlash® range covers your needs  
completely, from routine flash purification  
to ultra-preparative purification.



**Advion Interchim**  
scientific®

**puriFlash® R-Vap**

Laboratory rotary evaporator

# SUMMARY

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# SUMMARY

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<https://twitter.com/InterchimAdvion>



Accuracy  
& Repeatability

### **puriFlash® Generation 5**

Ultra Performance Flash Purification:

How to do high performance purification?

Our "Best-In-Class" instruments have been designed to make your purifications easier, more intuitive & more productive.

### **Compact & Advanced:**

The compact size improves ergonomics, sphere of use and workstation comfort. Various integrated technologies such as nanoELSD, UV, leak detectors and more increase the overall productivity of the instrument. You can safely optimize and manage your workspace: the "Fume Enclosure" function allows benchtop installation, freeing the fume hood for chemistry use.

Versatile in terms of applications, the on-board detection technologies guarantee maximum purification efficiency without product loss.

### **Reliable & Safe:**

There are no surprises or hidden costs to worry about after purchase.

Generation 5 puriFlash® is available 24/7 for purifications with confidence. The systems are robust and require minimal service.

The cost of ownership is under control.

Stay focused on your work with the peace of mind that you are obtaining the best possible purification.

There is no risk of product loss thanks to the complete monitoring of the system by multiple sensors, the overpressure management and pauses.

### **InterSoft® X:**

This is the "Simplicity" or "French-KISS" revolution, in reference to our origins (Keeps Intelligence Simple & Smart).

Its sleek design makes the chemist's life easier. It remains accessible to all users whether beginners or experts, with minimal training.

Intuitive, the Gen 5 pushes the boundaries with innovative Flash & Go, Load & Go and Boost & Go technologies. With InterSoft®X you can develop a method, challenge Genius or, if you prefer, create the method by yourself.

### **Genius™ :**

Your personal Artificial Intelligence, integrated in InterSoft® X, generates the best possible purification based on current knowledge.

Start the method safely and get your pure products!



### Flash&Go :


Take a picture of your TLC plate using our mobile application. Automatically send the data to InterSoft X "Genius". You are ready to perform the purification.

### Load&Go :

Load your liquid or solid sample with the multi-channel electric valve. InterSoft® X "Genius" manages column equilibration, sample loading and system cleaning.

### Boost&Go :

Intelligent management of the flow increase to speed up the purification process in complete safety.

 Flash & Prep columns, Dry-Loads, racks, loop identification & data implementation in Genius.



## ULTRA PERFORMANCE FLASH PURIFICATION



**puriFlash® XS 520 Plus**  
300 mL/min - 20 bar  
Small, but Mighty



**puriFlash® 5.020**  
300 mL/min - 20 bar  
The Partner of Daily Challenges



**puriFlash® 5.050**  
250 mL/min - 50 bar  
Cross-over Flash /Prep

## ULTRA HIGH PERFORMANCE PURIFICATION



**puriFlash® 5.250**  
250 mL/min - 250 bar  
Optimized for your preparative purifications



**puriFlash® 5.400-UV**  
125 mL/min - 400 bar  
The Ultra-Purification



**puriFlash® 5.250P**  
125 mL/min - 250 bar  
Purification of Complex Mixtures of Peptides

## PROCESS PURIFICATION



**puriFlash® 535-XL**  
400 mL/min - 35 bar  
Process - Kilo-Lab



**puriFlash® 5.015-XL**  
825 mL/min - 1.5 bar  
Process - Kilo-Lab



Find the complete range on our website.  
[www.flash-chromatography.com/](http://www.flash-chromatography.com/)

=> Download our dedicated literature

Ultra High Performance Purification - puriFlash® XS 520 Plus

**puriFlash® XS 520 Plus**

- Small Organic Molecules ●●●●●●
- Impurities Identification ●●●●○○
- Natural Products ●●●●○○
- Peptides, Oligonucleotides ●●●●○○
- Proteins, Bio-drugs ●●○○○○
- Metabolites Isolation ●●○○○○
- Traces Enrichment ●●●●●●

Accuracy & Repeatability

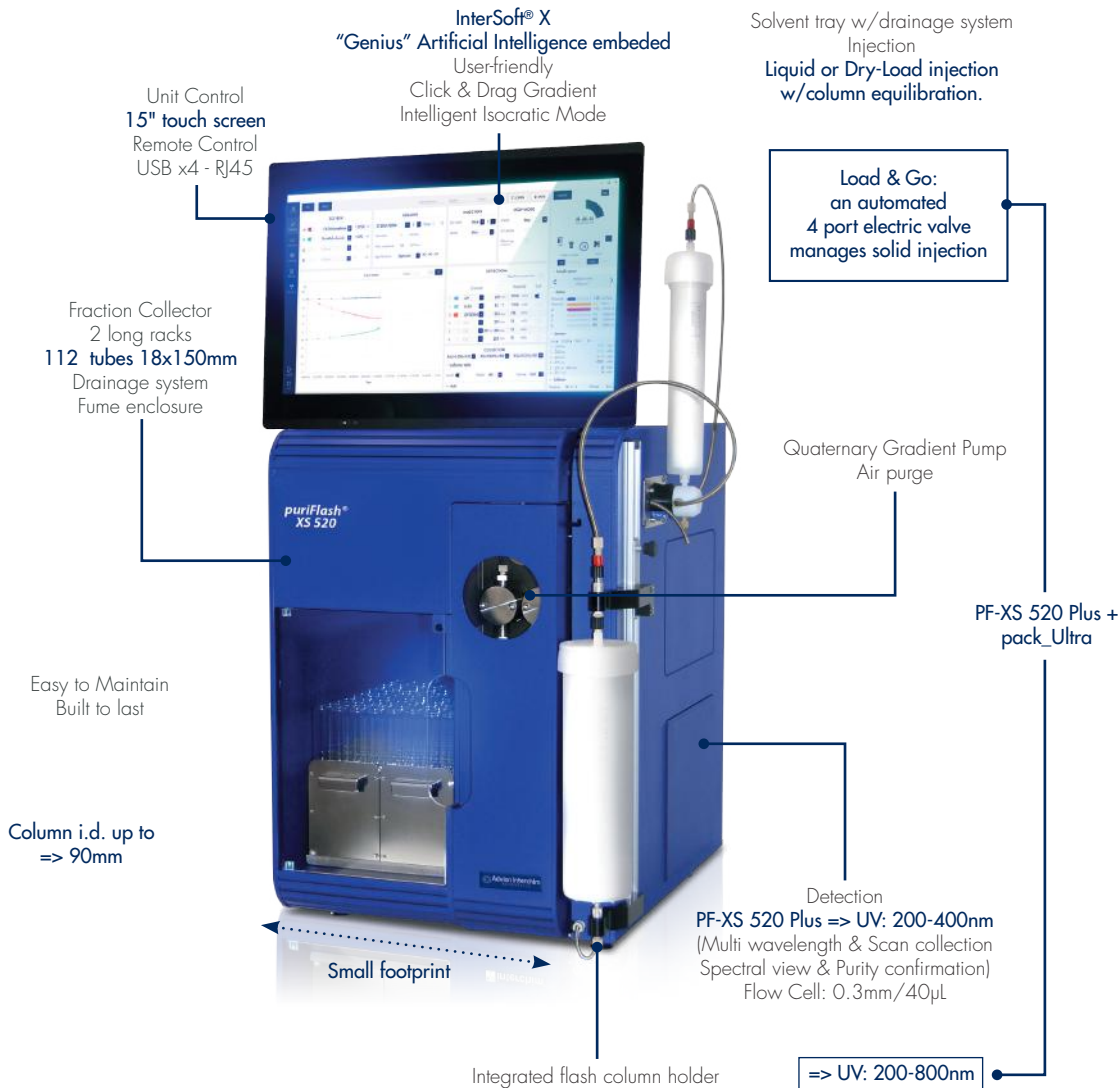
**300 mL/min**

up to **F0800**

**20 bar**

**Small but mighty**

Concentrated technology for unmatched performance. Designed for routine flash purification the technology and unique quality of the pump will take you much further. Increase the pressure and the puriFlash® XS 520 Plus will continue to offer precision, linearity and repeatability to perform complex and sophisticated purifications. No matter whether you're an expert or not, Genius will support you to achieve the best possible purification.



Flash & Go

Load & Go

Boost & Go

P/N : PFXS52



# LC PURIFICATION

## Ultra High Performance Purification - puriFlash® 5.020

### puriFlash® 5.020

Small Organic Molecules  
 Impurities Identification  
 Natural Products  
 Peptides, Oligonucleotides  
 Proteins, Bio-drugs  
 Metabolites Isolation  
 Traces Enrichment



Accuracy  
& Repeatability

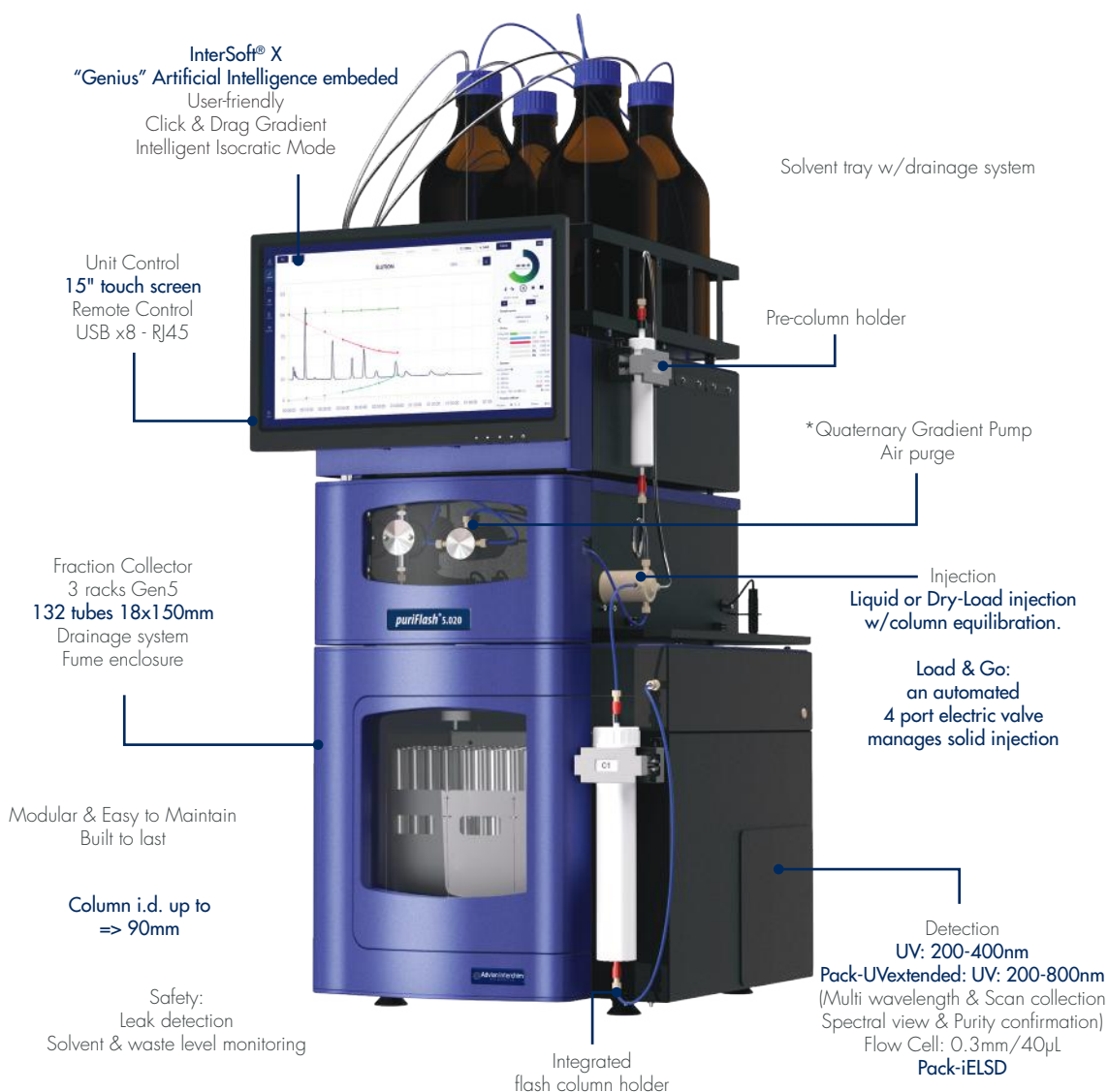
300  
mL/min

up to  
F0800

20  
bar

## The partner for your everyday challenges

Access to automation and more security. Spend more time on your purifications, allowing the integrated technology of the puriFlash® 5.020 to manage your system. This includes benefits such as an RFID detector, sensors for unexpected leakage, solvent level sensors and more.



Flash  
& Go



Load  
& Go



Boost  
& Go

[\* Supplied without injection valve and door]

P/N : PFG5B0

Ultra High Performance Purification - puriFlash® 5.050

**puriFlash® 5.050**

- Small Organic Molecules ●●●●●●●●
- Impurities Identification ●●●●○○
- Natural Products ●●●●○○
- Peptides, Oligonucleotides ●●●●○○
- Proteins, Bio-drugs ●●●●○○
- Metabolites Isolation ●●●●○○
- Traces Enrichment ●●●●●●●●

Accuracy & Repeatability

**250 mL/min**

up to **80mm i.d. Col.**

**50 bar**

**Cross-over Flash /Prep**

Access to preparative chromatography.  
 A single instrument to perform both flash and preparative purifications.  
 Switch from normal to reverse phase and work with reusable columns.  
 Build eco-friendly methods with sustainable purification development.

InterSoft® X  
 "Genius" Artificial Intelligence embedded  
 User-friendly  
 Click & Drag Gradient  
 Intelligent Isocratic Mode

Unit Control  
**15" touch screen**  
 Remote Control  
 USB x8 - RJ45

Fraction Collector  
 3 racks Gen5  
**132 tubes 18x150mm**  
 Drainage system  
 Fume enclosure

Modular & Easy to Maintain  
 Built to last

Column i.d. up to  
 => **80mm**

Safety:  
 Leak detection  
 Solvent & waste level monitoring

Solvent tray w/ drainage system

Pre-column holder

\*Quaternary Gradient  
 Pump Air purge  
 Washing discs

Injection  
 Liquid or Dry-Load injection  
 w/ column equilibration.

Load & Go:  
 an automated  
 6 port electric valve manages  
 liquid and solid injection

Detection  
 UV: 200-400nm  
 Pack-UVextended: UV: 200-800nm  
 (Multi wavelength & Scan collection  
 Spectral view & Purity confirmation)  
 Flow Cell: 0.3mm/40µl  
 Pack-iELSD

Integrated flash & prep  
 column holder



[\* Supplied without injection valve and door]

P/N : PFG5C0



# LC PURIFICATION

## Purification Flash characteristics

	Flash Purification XS 520 Plus			Flash Purification 5.020	Flash Purification 5.050
<b>Pump</b>					
Flow rate	300 mL/min			300 mL/min	250 mL/min
Max. pressure	20 bar			20 bar	50 bar
Quaternary Gradient	yes			yes	yes
Air purge	yes			yes	yes
Washing discs	no			no	yes
Pump washing discs (pack)	no			no	no
<b>Detector</b>					
	*Plus	_UVextended	_Ultra		
UV: 200 - 400 nm multi wavelength & scan collection	yes	no	no	yes	yes
UV: 200 - 800 nm multi wavelength & scan collection	no	yes	yes	pack-UVextended	pack-UVextended
Spectral view & purity confirmation	yes			yes	yes
iELSD Detection (pack)	no			pack-iELSD	pack-iELSD
<b>Injection</b>					
	*Plus	_UVextended	_Ultra		
4 port electrical valve	no	no	yes	pack 4-ways electric valve	no
6 port electrical valve w/loop	no			no	yes
6 port + 10 port electrical valves w/loop	no			no	no
Injection mode: liquid - Dry-Load	yes			yes	yes
<b>Column Selection valve</b>					
6 port electrical valve	no			no	no
<b>System Optimization</b>					
Tubing - after pump	1/8" x 1.6 mm id			1/8" x 1.6 mm id	1/8" x 1.6 mm id
Flow cell: optical length / Volume	0.3 mm/40 µL			0.3 mm/40 µL	0.3 mm/40 µL
<b>Column Holder</b>					
Integrated	yes			yes	yes
Pre-column holder	no			yes	yes
<b>Fraction Collector</b>					
Regular Collector	2 long racks 112 tubes 18 x 150 mm			3 racks Gen5 132 tubes 18 x 150 mm	3 racks Gen5 132 tubes 18 x 150 mm
<b>Unit control</b>					
Touch screen 15"	yes			yes	yes
USB	6			8	8
RJ45	yes			yes	yes
<b>Software</b>					
Intersoft® X	yes			yes	yes
<b>Safety</b>					
Leak detection (pump, FC, iELSD, holders)	no			yes	yes
Solvent & waste level monitoring	yes			yes	yes
Collector w/drainage system	yes			yes	yes
Solvent level monitoring	no			yes	yes
RFID	no			yes	yes
Fume Enclosure	yes			yes	yes
<b>Size</b>					
	W: 14" - 35.5 cm D: 18.5" - 47 cm H: 30" - 77 cm			W: 15.75" - 40 cm D: 20.0" - 51 cm H: 29.5" - 75 cm	W: 15.75" - 40 cm D: 20.0" - 51 cm H: 29.5" - 75 cm

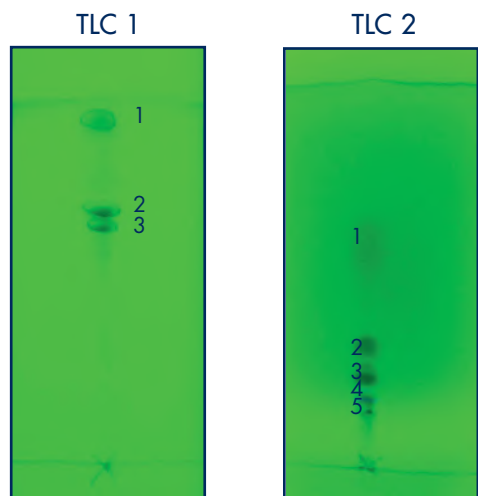


## Genius Makes Easy & Secured Purifications

Whatever your sample, from any of NP-TLC, NP-LC, NP-LC screening, RP-LC, RP-LC screening experiments, Genius, your personal Artificial Intelligence embedded in InterSoft® X, generates the best possible purification method in current knowledge.

Safely run the method and get your products pure!

### 1. TLC method development



Mobile phase:  
87% DCM / MeOH 13%

Compound	R <sub>f</sub>	CV
1	0.95	1.05
2	0.68	1.47
3	0.64	1.56

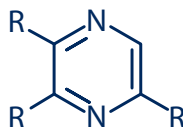
$\Delta CV_{3,2} = 0.09$

Mobile phase:  
90% Toluene / MeOH 10%

Compound	R <sub>f</sub>	CV
1	0.57	1.75
2	0.31	3.23
3	0.25	4
4	0.18	5.56
5	0.14	7.14

R<sub>f</sub> of compounds 2 and 3 are close, the separation will not be optimal on Flash column.

Genius provides new TLC conditions (TLC 2) in order to increase  $\Delta R_f$  &  $\Delta CV$ .



### 2. Genius proposal

Among the columns proposed by Genius, we have selected a PF-15SIHP-F0012, which was available in stock:

TLC to Flash & Prep (Normal Phase)

Crude sample 100

Solvent 1  90 % Additive

Solvent 2  10 % Additive

Select your compound(s) of interest

R<sub>f</sub> 0.57

R<sub>f</sub> 0.31

R<sub>f</sub> 0.25

R<sub>f</sub> 0.18

R<sub>f</sub> 0.14

#### SELECT A COLUMN

Column	Stock
PF-30SIHP-F0012	<input type="checkbox"/>
<b>PF-15SIHP-F0012</b>	<input checked="" type="checkbox"/>
PF-30SIHP-F0025	<input type="checkbox"/>
PF-30SIHP-F0040	<input type="checkbox"/>
PF-30SIHP-F0080	<input type="checkbox"/>
PF-30SIHP-F0120	<input type="checkbox"/>

Top 3 columns

#### INJECTION MODE

The crude is fully soluble in the below conditions:

Toluene 98.9%

Methanol 1.1%

Yes  No

Liquid  mL (max 1.66 mL)

Dry load

GO TO MANUAL METHOD

GO TO RUN



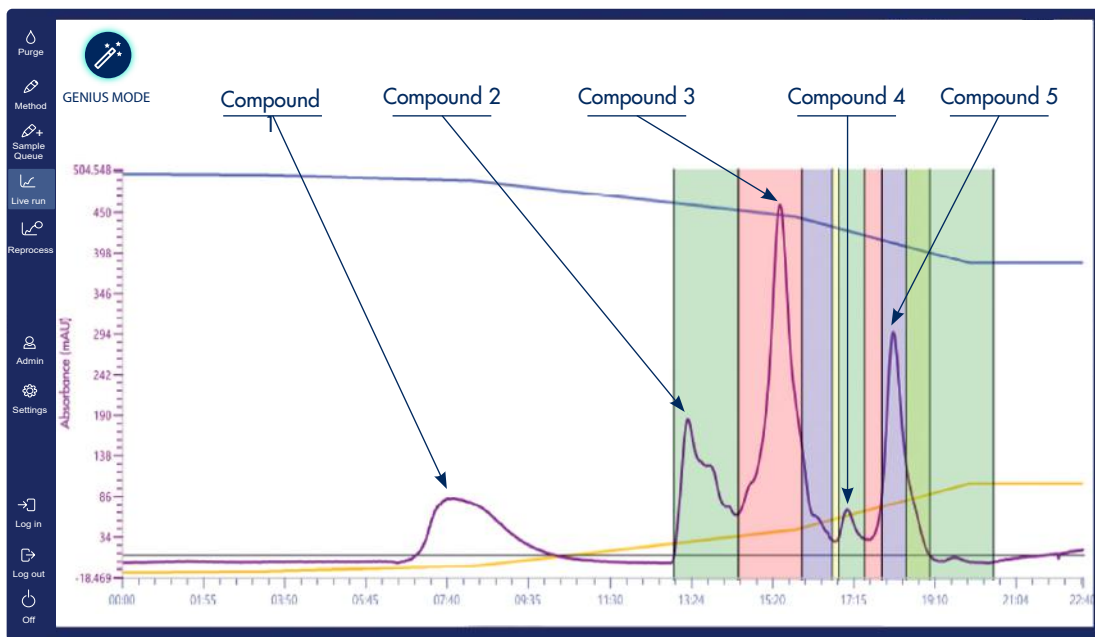
### 3. Flash conditions

Device: puriFlash® 5.020  
 Solvents: A: Toluene  
 B: Methanol  
 Column: PF-15SIHP-F0012  
 Flow rate: 15 mL/min  
 Injection mode: Solid deposit with celite  
 (Dry-load F0004)  
 Crude sample: 100 mg  
 Detection: UV 265 nm  
 Pressure: 4 bar  
 Elution conditions:

t (min)	A (%)	B (%)
00:00	98.9	1.1
03:27	98.6	1.4
08:17	97.3	2.7
15:52	88.4	11.6
20:00	77	23
26:13	77	23



**puriFlash® 5.250**  
 250 mL/min - 250 bar  
 Optimized for your  
 preparative purifications



# LC PURIFICATION

## Ultra High Performance Purification - puriFlash® 5.250

**puriFlash® 5.250**

- Small Organic Molecules
- Impurities Identification
- Natural Products
- Peptides, Oligonucleotides
- Proteins, Bio-drugs
- Metabolites Isolation
- Traces Enrichment

Accuracy & Repeatability

**250** ml/min

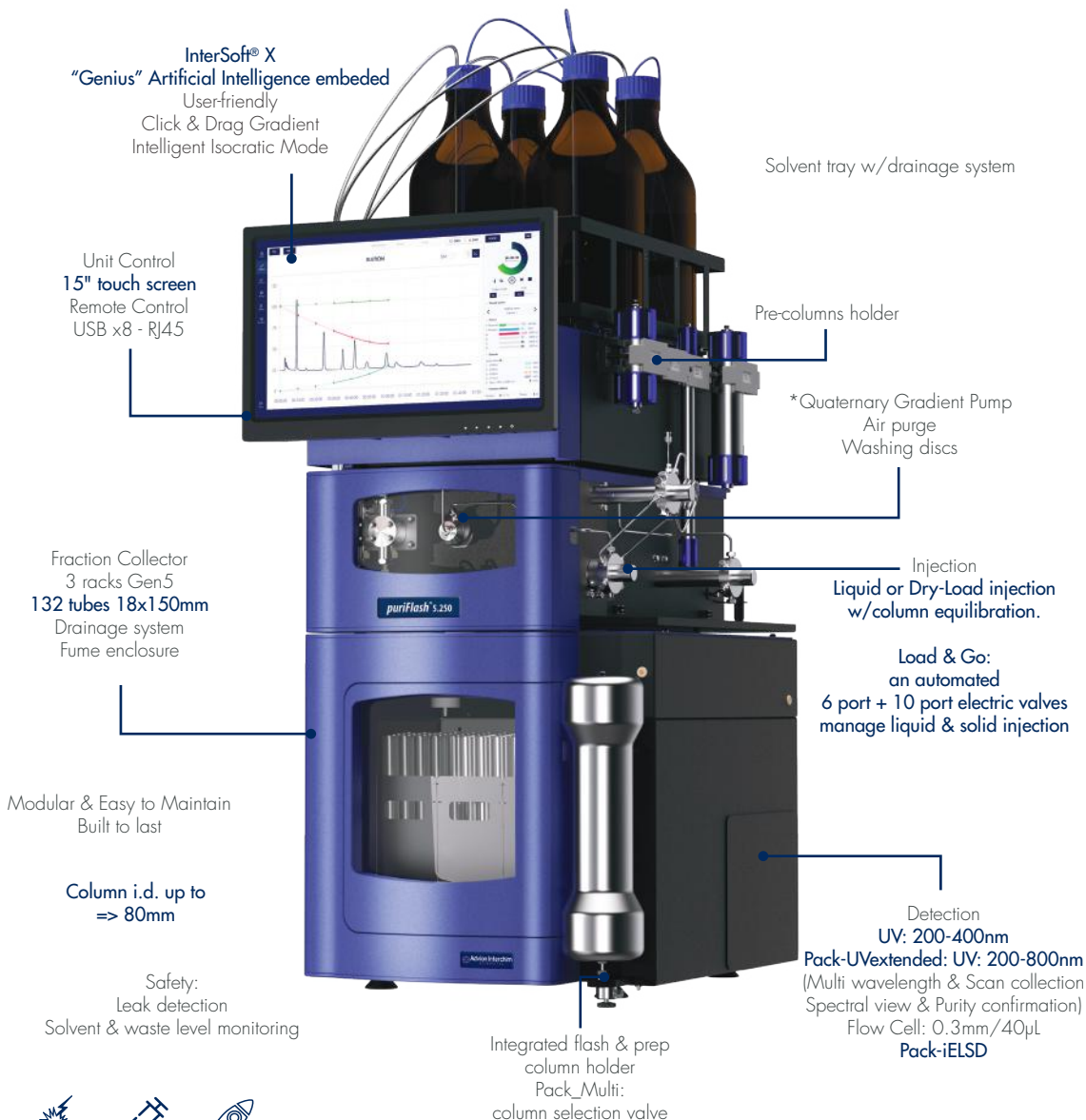
up to **80mm** i.d. Col.

**250** bar

### Small but limitless

Maximum Versatility and Flexibility.

The system brings unique performance in all circumstances. It adapts to all needs from routine purification to complex mixtures, impurity separation, or trace enrichment. It is continuously ready to start multiple purifications in normal or reverse phase, flash or prep.



[\* Supplied without injection valve and door]

P/N : PFG5E0

**puriFlash® 5.400-UV**

- Small Organic Molecules
- Impurities Identification
- Natural Products
- Peptides, Oligonucleotides
- Proteins, Bio-drugs
- Metabolites Isolation
- Traces Enrichment



Accuracy & Repeatability

**125** mL/min

up to **60mm** i.d. Col.

**400** bar

**For Ultra-Purification**

Method development and purification of rare and high added value compounds. For method development to purification on the same instrument, the system offers more flexibility, and great time savings. It is compatible with a sub-2 micron column for maximum separating power.

InterSoft® X  
 "Genius" Artificial Intelligence embedded  
 User-friendly  
 Click & Drag Gradient  
 Intelligent Isocratic Mode

Unit Control  
**15"** touch screen  
 Remote Control  
 USB x8 - RJ45

Fraction Collector  
 3 racks Gen5  
**132 tubes** 18x150mm  
 Drainage system  
 Fume enclosure

Modular & Easy to Maintain  
 Built to last

Column i.d. up to  
 => **60mm**

Safety:  
 Leak detection  
 Solvent & waste level monitoring

Solvent tray w/drainage system

\*Quaternary Gradient Pump  
 Washing discs

Injection  
 Liquid or Dry-Load injection  
 w/column equilibration.

Load & Go:  
 an automated  
 6 port + 10 port electric valves  
 manage liquid injection

Detection  
 UV: 200-400nm  
 Pack-UVextended:  
 UV: 200-800nm  
 (Multi wavelength  
 & Scan collection  
 Spectral view & Purity confirmation)  
 Flow Cell: 1.0mm/20µL

Integrated prep column holder



[\*Supplied without injection valve and door]

P/N : PFG5F0

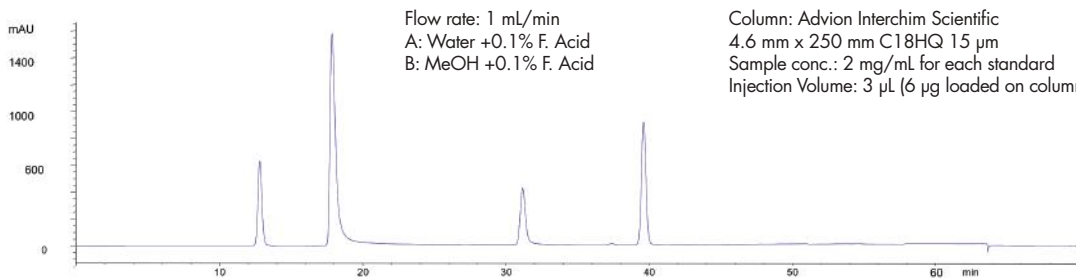


# LC PURIFICATION

## Purification Prep Ultra-prep characteristics

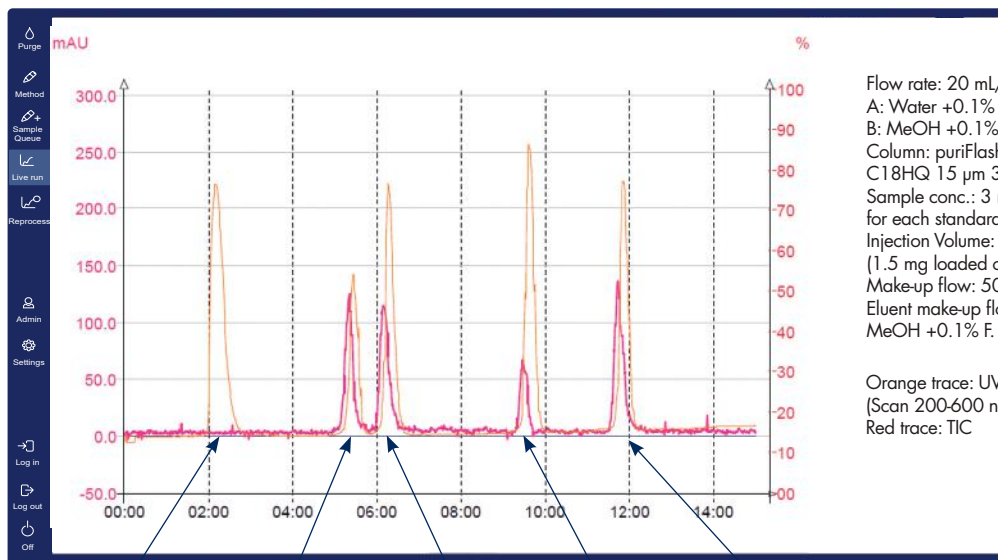
	Preparative 5.250	Ultra-Prep 5.400-UV
<b>Pump</b>		
Flow rate	250 mL/min	125 mL/min
Max. pressure	250 bar	400 bar
Quaternary Gradient	yes	yes
Air purge	yes	no
Washing discs	yes	yes
Pump washing discs (pack)	pack-PWD	pack-PWD
<b>Detector</b>		
UV: 200 - 400 nm multi wavelength & scan collection	yes	yes
UV: 200 - 800 nm multi wavelength & scan collection	pack-UVextended	pack-UVextended
Spectral view & purity confirmation	yes	yes
iELSD Detection (pack)	pack-iELSD	no
<b>Injection</b>		
4 port electrical valve	no	no
6 port electrical valve w/loop	no	no
6 port + 10 port electrical valves w/loop	yes	yes
Injection mode: liquid - Dry-Load	yes	no
<b>Column Selection valve</b>		
6 port electrical valve	pack-Multi	no
<b>System Optimization</b>		
Tubing - after pump	1/8" x 1.6 mm id	0.5 & 0.75 mm
Flow cell: optical length / Volume	0.3 mm/40 µL	1.0 mm/20 µL
<b>Column Holder</b>		
Integrated	yes	yes
Pre-column holder	yes	no
<b>Fraction Collector</b>		
Regular Collector	3 racks Gen5 132 tubes 18 x 150 mm	3 racks Gen5 132 tubes 18 x 150 mm
<b>Unit control</b>		
Touch screen 15"	yes	yes
USB	8	8
RJ45	yes	yes
<b>Software</b>		
Intersoft® X	yes	yes
<b>Safety</b>		
Leak detection (pump, FC, iELSD, holders)	yes	yes
Solvent & waste level monitoring	yes	yes
Collector w/drainage system	yes	yes
RFID	yes	yes
Fume Enclosure	yes	yes
<b>Size</b>		
	W: 15.75" - 40 cm D: 20.0" - 51 cm H: 29.5" - 75 cm	W: 15.75" - 40 cm D: 20.0" - 51 cm H: 29.5" - 75 cm

HPLC analysis using standard gradient method



Gradient transfer method

UPFP-APCI/MS



Flow rate: 20 mL/min  
 A: Water +0.1% F. Acid  
 B: MeOH +0.1% F. Acid  
 Column: puriFlash® Column  
 C18HQ 15 µm 35 g  
 Sample conc.: 3 mg/mL  
 for each standard  
 Injection Volume: 500 µL  
 (1.5 mg loaded on column)  
 Make-up flow: 500 µL/min  
 Eluent make-up flow:  
 MeOH +0.1% F. Acid

Orange trace: UV  
 (Scan 200-600 nm)  
 Red trace: TIC

Solvent      Theophylline      Papaverine      Quercetin      Piperine

LC Transfer

Current conditions

Dwell volume system	HPLC 700 µl	
Mobile phase	Water - Methanol	
Middle weight range Mw (g/mol)	300 g/mol	
Current column		
Length	250 mm	
Internal Diameter	4,6 mm	
Particle Size	15,0 µm	
Flow rate	1,00 ml/min	
Chromatography mode		
Injection volume	3 µL	
Resolution (Rs)	4,00	
Max observed pressure	350 Bar	
Current table		
Time	A%	B%
0,0 min	40	40
1,0 min	60	40
30,0 min	25	75
40,0 min	25	75

Method transfered

Dwell volume system	PF-5.250		
Column transfered			
Length or bed length	114 mm		
Internal Diameter	27,0 mm		
Particle Size	15,0 µm		
Scaling Flow rate	34,00 ml/min		
Recommended flow rate	26,00 ml/min		
Method flow rate	28,00 ml/min		
Injection volume	0,047 mL		
Table transfered			
Time	Time (h:ms)	A%	B%
0,0 min	00:00:00	40	40
0,5 min	00:00:27	60	40
16,7 min	00:16:43	25	75
22,3 min	00:22:20	25	75



- Flash & Go
- Load & Go
- Boost & Go

**puriFlash® 5.250**  
 250 mL/min - 250 bar  
 Optimized for your  
 preparative purifications



# LC PURIFICATION

Peptides purification - puriFlash® 5.250P

**puriFlash® 5.250P**

- Small Organic Molecules ●●●●○
- Impurities Identification ●●●●●
- Natural Products ●●●●●
- Peptides, Oligonucleotides ●●●●●
- Proteins, Bio-drugs ●●●○●
- Metabolites Isolation ●●●●●
- Traces Enrichment ●●●●●

Accuracy & Repeatability

**125** ml/min

up to **60mm** i.d. Col.

**250** bar

## Purification of complex mixtures of peptides

Maximum efficiency.  
Small particle size combined with low dead volume allows for separation of peptides with similar amino acid sequences.

InterSoft® X  
"Genius" Artificial Intelligence embedded  
User-friendly  
Click & Drag Gradient  
Intelligent Isocratic Mode

Unit Control  
**15" touch screen**  
Remote Control  
USB x8 - RJ45

Solvent tray w/drainage system

Pre-columns holder

\*Quaternary Gradient Pump  
Air purge  
Washing discs + Pump

Fraction Collector  
3 racks Gen5  
**132 tubes 18x150mm**  
Drainage system  
Fume enclosure

Injection  
Liquid or Dry-Load injection  
w/column equilibration.

**Load & Go:**  
an automated 6 port electric valve  
+ 10 port electric valve  
manage liquid & solid injection

Modular & Easy to Maintain  
Built to last

Column i.d. up to  
=> **60mm**

Safety:  
Leak detection  
Solvent & waste level monitoring

Detection  
UV: 200-400nm  
Pack-UVextended: UV: 200-800nm  
(Multi wavelength & Scan collection  
Spectral view & Purity confirmation)  
Flow Cell: 1.3mm/55µl  
Pack-iELSD

Integrated flash & prep  
column holder



[\* Supplied without injection valve and door]

P/N: PFG5Q0

## Purification Peptides &amp; Oligonucleotides characteristics

	Peptides & Oligonucleotides PF-5.250P
<b>Pump</b>	
Flow rate	125 mL/min
Max. pressure	250 bar
Quaternary Gradient	yes
Air purge	yes
Washing discs	yes
Pump washing discs (pack)	yes
<b>Detector</b>	
UV: 200 - 400 nm multi wavelength & scan collection	yes
UV: 200 - 800 nm multi wavelength & scan collection	pack-UVextended
Spectral view & purity confirmation	yes
iELSD Detection (pack)	pack-iELSD
<b>Injection</b>	
4 port electrical valve	no
6 port electrical valve w/loop	no
6 port + 10 port electrical valves w/loop	yes
Injection mode: liquid - Dry-Load	yes
<b>Column Selection valve</b>	
6 port electrical valve	pack-Multi
<b>System Optimization</b>	
Tubing - after pump	peek 1/16" x 0.75 mm id
Flow cell: optical length / Volume	1.3 mm/55 µL
<b>Columns Holder</b>	
Integrated	yes
Pre-column holder	yes
<b>Fraction Collector</b>	
Regular Collector	3 racks Gen5 132 tubes 18 x 150 mm
<b>Unit control</b>	
Touch screen 15"	yes
USB	8
RJ45	yes
<b>Software</b>	
Intersoft® X	yes
<b>Safety</b>	
Leak detection (pump, FC, iELSD, holders)	yes
Solvent tray w/drainage system	yes
Collector w/drainage system	yes
Solvent & waste level monitoring	yes
RFID	yes
Fume Enclosure	yes
<b>Size</b>	

W: 15.75" - 40 cm  
D: 20.0" - 51 cm  
H: 29.5" - 75 cm



## CAN TFA AND MS DETECTION BE COMPATIBLE DURING A PURIFICATION?

## 1. Flash conditions

Device: puriFlash® 5.250P

Solvents:

A: Water +0.1% TFA

B: Acetonitrile +0.1% TFA

Column: PFB-15C18N-F0025

Flow rate: 15 mL/min

Injection mode: Liquid

Injection volume: 150 µL

Concentration: 20 mg/mL

Crude sample: 3 mg

Detection: UV 214 nm (purple)

Mass XIC1 235-241 m/z (Dark red)

Mass XIC2 377-383 m/z (Orange)

Mass XIC3 571-577 m/z (Green)

Mass TIC 220-1200 m/z (Blue)

ESI Source

Pressure: 5 bar

Solvent make-up and dilution:

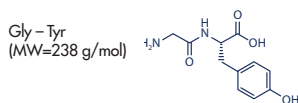
Test 1: Isopropanol

Test 2: Solution of Propionic Acid

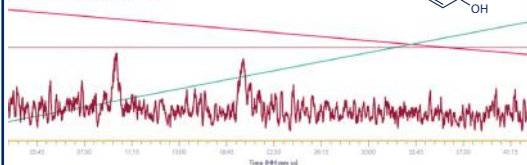
in Isopropanol (25/75) (TFA-Fix)

Elution conditions:

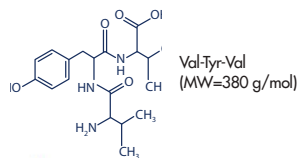
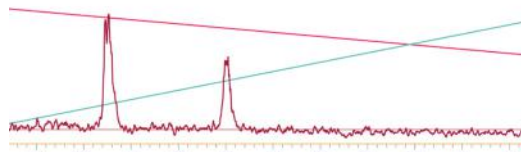
t (min)	A (%)	B (%)
00:00	95	5
45:00	60	40



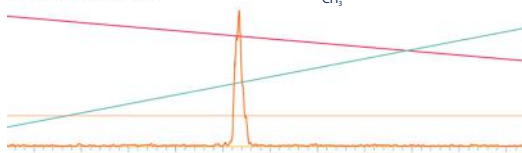
235-241m/z without TFA Fix



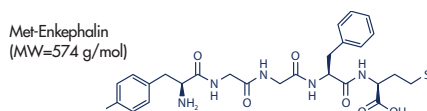
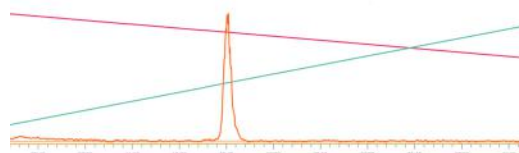
235-241m/z with TFA Fix



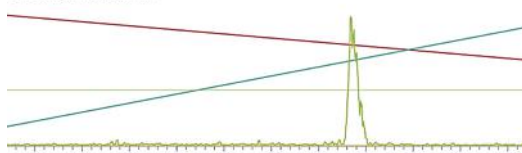
377-383m/z without TFA Fix



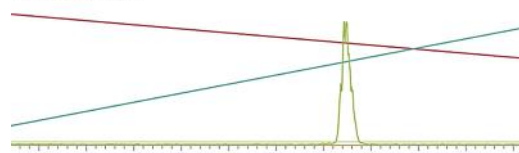
177-383 with TFA Fix



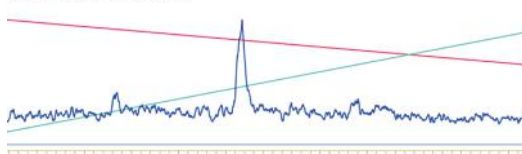
571-577m/z without TFA Fix



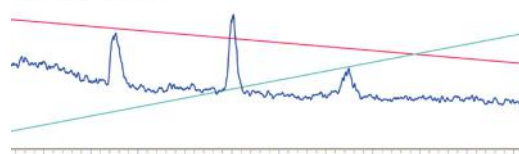
571-577m/z with TFA Fix



220-1200m/z without TFA Fix



20-1200m/z with TFA Fix



## Conclusion

Mass detection is not completely compatible with TFA.

This trick can therefore be used to avoid having to redevelop new methods, and therefore allows a significant time saving.



**puriFlash® 535-XL**

- Small Organic Molecules ●●●●●●
- Impurities Identification ●●●●○
- Natural Products ●●●●○
- Peptides, Oligonucleotides ●●●●○
- Proteins, Bio-drugs ●●○○○
- Metabolites Isolation ●●○○○
- Traces Enrichment ●●●●●



**400**  
mL/min  
**up to**  
**F1600**  
**35**  
bar

**Process - Kilo-Lab**

Reliable and robust with significant loading capacity. Its reliability and robustness over time, as well as security features, are essential assets to make semi-continuous production effective with up to hundreds of grams of the compound of interest. Achieve production continuity on the same device independently of the scale-up factor.

InterSoft® X  
"Genius" Artificial Intelligence embedded  
User-friendly  
Click & Drag Gradient  
Intelligent Isocratic Mode

Solvent tray w/drainage system

Unit Control  
**1.5" touch screen**  
Remote Control  
USB x4 - RJ45

Injection  
Liquid or Dry-Load injection  
w/column equilibration.

Fraction Collector  
2 long racks  
**112 tubes 18x150mm**  
Drainage system  
Fume enclosure



Quaternary Gradient Pump  
Air purge

Easy to Maintain  
Built to last

Column i.d. up to  
=> 100mm

Detection  
**UV: 200-400nm**  
(Multi wavelength & Scan collection  
Spectral view & Purity confirmation)  
Flow Cell: 0.3mm / 40µL  
**Pack-UVextended: UV: 200-800nm**

Small footprint

Pack-ColHolder:  
Integrated flash column holder



P/N : PFXL02



# LC PURIFICATION

Process purification - puriFlash® 5.015-XL

## puriFlash® 5.015-XL

- Small Organic molecules ●●●●●●
- Impurities Identification ○○○○○○
- Natural Products ●●●●○○
- Peptides, Oligonucleotides ●●●○○○
- Proteins, Bio-drugs ●●○○○○
- Metabolites Isolation ●●○○○○
- Traces Enrichment ●●●●●●



825 mL/min

up to 150mm i.d. Col.

15 bar

### Process - Kilo-Lab

Reliability & robustness with significant loading capacity. Its reliability, its robustness over the time as well as its security features are the essential assets to make semi-continuous productions effective up to Kgs of compound of interest. Continuity of production on the same device independently of the scale-up factor.

**InterSoft® X**  
 "Genius" Artificial Intelligence embedded  
 User-friendly  
 Click & Drag Gradient  
 Intelligent Isocratic Mode

Unit Control  
 15" touch screen  
 Remote Control  
 USB x8 - RJ45

Fraction Collector  
 3 racks Gen5  
 44 tubes 29.5x200mm  
 Drainage system  
 Fume enclosure

Modular & Easy to Maintain  
 Built to last

Column i.d. up to  
 => 150mm

Safety:  
 Leak detection  
 Solvent & waste level monitoring

Solvent tray w/drainage system

\*Quaternary Gradient Pump  
 Washing discs

Detection  
 UV: 200-400nm  
 Pack-UVextended:  
 UV: 200-800nm  
 (Multi wavelength  
 & Scan collection  
 Spectral view  
 & Purity confirmation)  
 Flow Cell: 0.3mm/80µL

Pack-Process:  
 Integrated flash column holder  
 & pre-column holder



[\* Supplied without injection valve and door]

P/N : PFG5L0

## Purification Process characteristics

	Flash Purification Process 535-XL	Flash Purification Process 5.015-XL
<b>Pump</b>		
Flow rate	400 mL/min	825 mL/min
Max. pressure	35 bar	15 bar
Quaternary Gradient	yes	yes
Air purge	yes	no
Washing discs	no	yes
Pump washing discs (pack)	no	no
<b>Detector</b>		
UV: 200 - 400 nm multi wavelength & scan collection	yes	yes
UV: 200 - 800 nm multi wavelength & scan collection	pack-UVextended	pack-UVextended
Spectral view & purity confirmation	yes	yes
iELSD Detection (pack)	no	no
<b>Injection</b>		
4 port electrical valve	no	no
6 port electrical valve w/loop	no	no
6 port + 10 port electrical valves w/loop	no	no
Injection mode: liquid - Dry-Load	yes	yes
<b>Column Selection valve</b>		
6 port electrical valve	no	no
<b>System Optimization</b>		
Tubings - after pump	1/8" x 1.6 mm id	1/8" x 2.4 mm id
Flow cell: optical length / Volume	0.3 mm/40 µL	0.3 mm/80 µL
<b>Column Holder</b>		
Integrated	pack-ColHolder	pack-Process
Pre-column holder	no	pack-Process
<b>Fraction Collector</b>		
Regular Collector	2 long racks 112 tubes 18 x 150 mm	3 racks Gen5 42 tubes 29.5 x 200 mm
<b>Unit control</b>		
Touch screen 15"	yes	yes
USB	6	8
RJ45	yes	yes
<b>Software</b>		
Intersoft® X	yes	yes
<b>Safety</b>		
Leak detection (pump, FC, iELSD, holders)	no	yes (except holders)
Solvent tray w/drainage system	yes	yes
Collector w/drainage system	yes	yes
Solvent & waste level monitoring	no	yes
RFID	no	yes
Fume Enclosure	yes	yes
<b>Size</b>		
	W: 14" - 35.5 cm D: 18.5" - 47 cm H: 30" - 77 cm	W: 15.75" - 40 cm D: 20.0" - 51 cm H: 29.5" - 75 cm

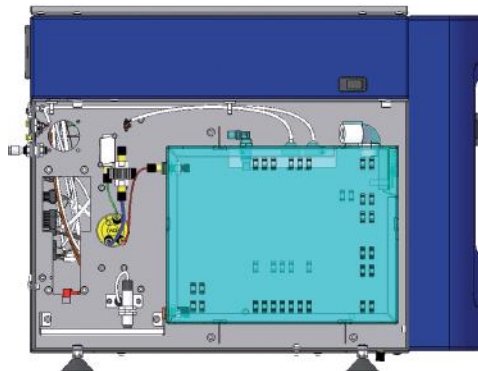
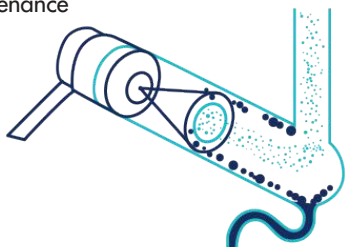


# LC PURIFICATION

## Preparative Integrated ELSD

### Secure your purification by a Universal Detector

- Even non-chromophores are now visible
- Specifically developed for purification as a mass response detector
- Full control of the split and the inlet flow
- True purification nebulizer design: no clogging
- Large dynamic range: mg up to hundred g
- Easy access & maintenance

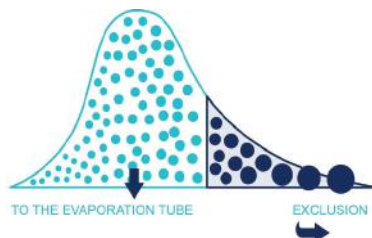


Optimized **Low Temperature** Technology.  
**Quicker droplets** drying at lower temperature.  
 Preserves the integrity of thermo-sensitive compounds.

### Low Temperature Technology:

This technology provides greater sensitivity with both the nebulizer that enables droplet selection and an effective photomultiplier.

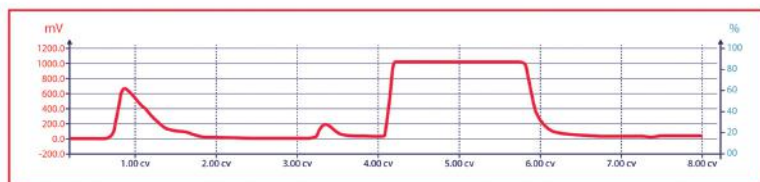
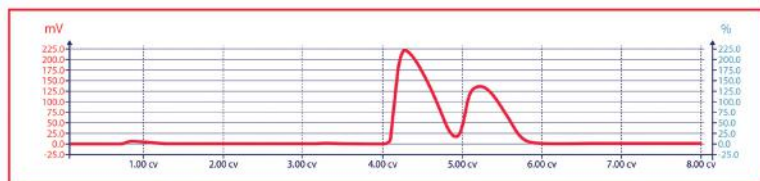
With this patented nebulizer technology, the droplets dry faster at low temperatures, providing appropriate signal intensities for semi-volatile compounds. This technology requires no additional peripherals, such as a nebulizer with heating system (spray chamber) or an evaporation tube (Peltier cooling) that can degrade the heat-sensitive compounds.



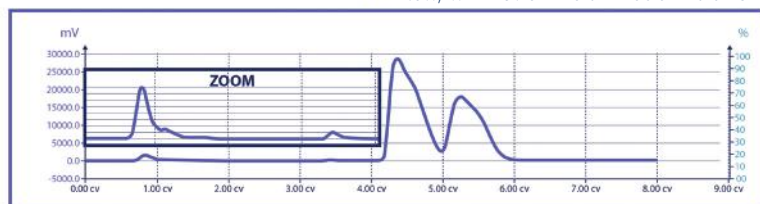
### Dynamic Gain SAGA:

SAGA adapts the gain to avoid saturation while continuing to detect small quantities of products.

ELSD becomes unsaturable without impact on sensitivity.



Now, with Advion Interchim Scientific SAGA



- Detection: high sensitivity photodiode
- Source: LED (470 nm)
- Ambient temperature to 100°C
- Dynamic Split: 40  $\mu$ L/min sample in ELSD
- Gas: 1-1.5 L/min - 1 bar

Mass triggered fraction collection for NP & RP Flash Purification & prep-LC

Unique design dynamic splitter & dilution:

- High-speed work with all columns sizes without generating backpressure
- Integrated post-split dilution to adjust the concentrations used in the MS source (no concentration limit - no signal saturation)
- Normal & Reverse Phase
- Intelligent control of the puriFlash® system
- Normalized Scale of MS, UV, ELSD signals (6 acquisition signals)



Compact Single Quad - APCI

Real-time reaction monitoring of batch reactions.

The hood-based puriFlash® MS reduces the burden on open-access platforms.

P/N: CMS-S02

P/N: CMS-L02

expression<sup>S</sup>  
CMS

expression<sup>L</sup>  
CMS

	puriFlash® MS for small molecules, synthetic organic chemists. Upgraded specs for pos/neg switching, faster scanning & higher flow rate	puriFlash® MS-HMW for large molecules - peptide synthesis, polymer chemistry & natural products
Sources	APCI - APCI/ASAP - ESI	APCI - APCI/ASAP - ESI
Patented API	Orthogonal ion sampling from heated capillary allows for small single turbo pump.	Orthogonal ion sampling from heated capillary allows for small single turbo pump.
Positive/Negative Ionization	Simultaneous analysis	Simultaneous analysis
Flow rate range ESI	10 µL/min - 1 mL/min	10 µL/min - 1 mL/min
Flow rate range APCI	10 µL/min - 2 mL/min	10 µL/min - 2 mL/min
Mass range (m/z)	10 to 1 200	10 to 2 000
Scan rate (m/z-units per second)	10 000	10 000
Resolution (m/z-units FWHM)	0.5 - 0.7	0.5 - 0.7
Sensitivity (SIM - S/N 10 pg Reserpine, FIA 5 µL injection at 100 µL/min)	100:1	100:1
Accuracy (m/z)	0.1	0.1
Stability (m/z-units per 24 hour period: 18 - 24°C)	0.1	0.1



# COMPACT MASS SPECTROMETRY

The expression CMS family of compact mass spectrometers

**expression**  
CMS

The family of **expression**<sup>®</sup> CMS was developed with maximum versatility in mind allowing users to switch rapidly between various sample introduction techniques with little sample preparation. The affordability, small size, and ease of use make them ideal for a variety of applications including reaction monitoring, teaching, cannabis/hemp, food/ingredients, environmental and more.

Most laboratories require the ability to analyze a range of samples using more than one technique for more complete identification and characterization of samples. The **expression**<sup>®</sup> CMS integrates with nearly every chemistry technique from the simplest, fastest direct probe analysis requiring no sample preparation to ultra-high performance compound separation with LC integration. The **expression**<sup>®</sup> CMS offers the most versatile sample techniques on the market.



ASAP<sup>®</sup>: Atmospheric Solids Analysis Probe



Plate Express<sup>™</sup>: TLC/CMS Mass Analysis of TLC spots



AVANT<sup>™</sup> Chromatography Systems: (U)HPLC/CMS



iASAP: Direct Analysis of Air-Sensitive Compounds



Direct Injection (FIA)

High performance compact mass spec designed especially for chemists



vAPCI: Volatile APCI for Gas Analysis



Flow Chemistry Monitoring & Automated, Real-Time, Optimization



Purification by Flash, SFC, or Prep-LC/CMS



Touch Express<sup>™</sup> Open Port Sampling Interface (OPSI)

## TLC-FlashReader™

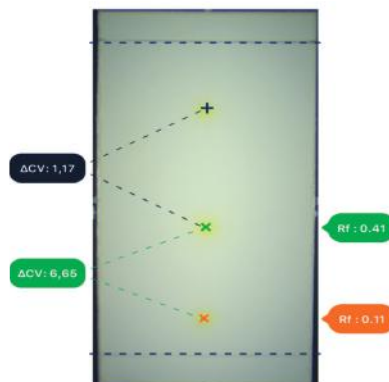
The TLC-FlashReader is an ultra-compact and robust TLC plate reader with a camera and 3 different lamps: white light, 254 nm & 366 nm. It satisfies users working in Research, Development, Quality Control and Process. It is a multifunctional device that allows you to :

- View, archive and insert your TLC plates into your electronic laboratory notebook.
- Automatically transfer your TLC data (image, Rf, solvents,  $\Delta CV$ ) directly to the InterSoft X® software.

Need to archive TLC plates of your crude sample, your fractions collected after your purification or your reaction monitoring? The TLC-FlashReader will meet your needs.

The instrument has its own easy and intuitive software. The software has different algorithms for automatic recognition of compounds, solvent front and deposit line. The software saves the user time and provides accurate results.

- Ultra-compact module (Size: W 17 cm x D 22 cm x H 31 cm)
- Illumination with white light, UV 254 nm & UV 366 nm
- Compatible with aluminum or glass TLC plates up to 8.5 cm wide and 12.5 cm high
- Controlled by TLC-FlashReader software
- Visualization and archiving of TLC plates
- Automatic recognition of compounds, deposit line and solvent front
- Automatic calculation of Rf and  $\Delta CV$
- Automatic transfer of images, Rf, solvent name and %,  $\Delta CV$  to Genius
- Can be used in stand-alone mode with an external computer or coupled to the puriFlash® Gen5.
- Automatic lamp shut off when the drawer is opened to protect you from UV radiation
- 2 year warranty excluding wear parts



P/N: BKZY00



## puriFlash® AS-1

### Autosampler for purification systems

puriFlash® AS-1 is indispensable for increasing the productivity. The performances can be increased tenfold during purification on a multi-column systems on HPLC preparative or flash chromatography columns by managing a sample queue on InterSoft® X software.



Injection volume:  
500 µl to 50 mL

Liquid injection  
with column equilibration.

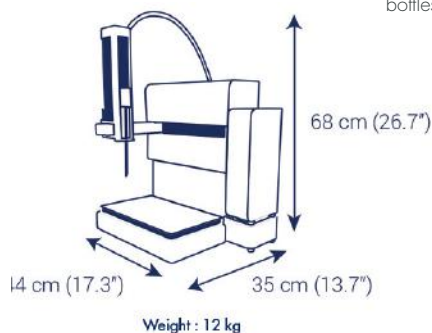
Load & Go:  
Automated injection,  
6-way or 10-way electric valve

- 10 mL syringe
- Flat tip needle

#### Mode of operation:

- Sample injection
- Washing cycles: solvent lines and needle
- Injection bracketing

1 rack/slot for different capacities of test tubes  
bottles up to 250 mL and custom racks



P/N	Description
1G9761	8" Sample probe flat bottom
1H2920	25.0 mL Syringe
A2UNGO	Tubing kit from 20 mL to 50 mL injection loop

P/N : LO8850



## puriFlash® Injection Pump

### Principle

When the quantity of product to be injected becomes important and when having to use a syringe and multiply the injections for a single purification becomes constraining, the injection pump is the ideal tool. You just have to prime the pump with the product and then launch the method.

### Automated injection

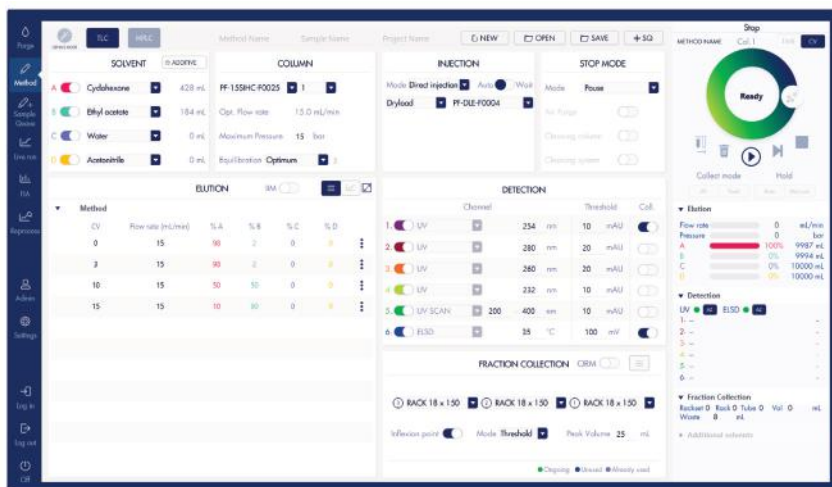
No need to inject your sample in several times on the column, the injection pump takes care of everything.

### Feature:

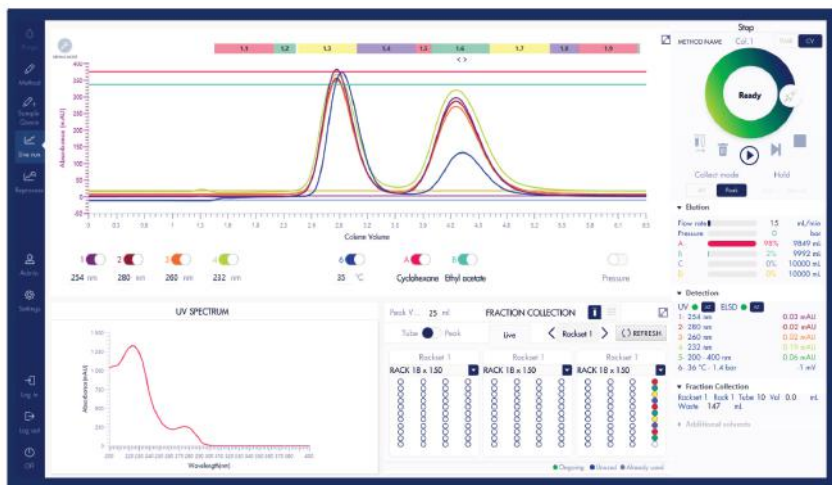
- Automation of large volume injection
- Precision and repeatability of the injected quantity
- Dedicated to high volume injections
- Flow rate range 1-250 mL/min
- Max pressure 125 bar
- Specially designed for high volume injection, mainly used with F0800, F1600, F3000, F5000 and F10K columns.



InterSoft® X



- Accessibility of multi-profile users with minimum training.
- Best-in-class design that makes the chemist's life easier.
- Challenge Genius, your Personal Artificial Intelligence, to develop the purification method, or do it by yourself.
- "Push the boundaries" with the intuitive Flash & Go, Load & Go and Boost & Go technologies.

Flash  
& Go

Flash your TLC plate using our mobile app., automatically send the data to InterSoft® X "Genius". You are set to run the purification.

Boost  
& Go

Intelligent management of the flow rate increase to safely speed up the purification.

Load  
& Go

Load your liquid or solid sample through the multi-way electrical valve. InterSoft® X "Genius" will manage the column equilibration, sample loading and system cleaning for you.



Flash & Prep columns, Dry-Loads, racks, loops identification & data implementation into "Genius".



## "TLC to Flash & Prep Chromatography"

Revolutionize your TLC using our App

### Software intelligence for a greatly improved daily routine.

As experts in purification, we offer maximum working comfort and the highest efficiency for your laboratory. Thanks to the app that we have developed, we can share your vision for the future by constantly providing new technology solutions. It takes a digital form here, virtual but already real on the screen of your mobile or tablet.

### A unique technology that slides through your fingers with one single click.

Our goal is to support you and to save you time day after day. Therefore our App allows:

- Automatic detection of your compounds and calculation of  $R_f$  and  $\Delta CV$  ( $=\Delta K$ ) values.
- Direct (and secure) information transfer to puriFlash® and the "Genius" AI, which suggests the best method for a successful purification.
- Data archiving.



### Flash & Go: "New TLC"

The application is extremely intuitive and user-friendly:



Take a picture of the TLC with your smartphone or download it from your library.



Your compounds will be automatically detected. Select the ones of interest with a tap.



The application calculates  $R_f$  and  $\Delta CV$  ( $=\Delta K$ ). It indicates if the  $R_f$  are placed in the comfort zone to carry out your purification.



From the smallest  $\Delta CV$  obtained on your TLC plate, the application gives you the level of difficulty of the separation.



Indicate the solvents, their proportions and your comments in the dedicated areas.



Save your TLC plate information. Send them to the email address of your choice or directly to your puriFlash® by bluetooth or wifi: the "Genius" AI will recommend the best method for a successful purification.



### "MY TLC" for data customization

All information from your previous TLC plates are archived in a single location. In case you would like to reuse the parameters of the plate for a new separation, simply send them to any puriFlash® with a single click.



### "SETTINGS" to personalize your experience

Connect your smartphone and tablet with your puriFlash® via bluetooth or Wifi. Configure your application according to your preferences. Quickly and directly access our internet sites.

### Do you need a tablet or smartphone to benefit from our application in your laboratory?

Nothing is more simple: select your choice from the accessories offered for all our purification systems.

"TLC to Flash & Prep Chromatography" is a free application. Our wish was to enable everybody to use it freely. You can even use it if you do not possess a puriFlash® purification system. Nevertheless, your experience as an user may be reduced since only our systems are equipped with a unique technology that allows data exchange. Therefore you cannot equally benefit from the "Genius" proposals with regard to the best method developments for your purification.

# Genius

"Keeps Intelligence Simple, Smart"



Whatever your sample  
from any of NP-TLC, NP-LC, NP-LC screening, RP-LC, RP-LC screening  
experiments,

Genius, your Personal Artificial Intelligence embedded in InterSoft® X,  
generates  
the best possible purification method in the current knowledge.

FR 3079932A1

(French patent number)

Run the method safely and get your products pure!

## InterSoft® X

"Keeps Intelligence Simple, Smart"



- Accessibility of multi-profile users with minimal training -
- Best-In-Class design that makes the Chemist's life easier -
- "Push the boundaries" with Flash&Go, Load&Go and Boost&Go intuitive technology
- Challenge Genius, your Personal Artificial Intelligence, to develop the Purification Method, or do it by yourself -

## puriFlash® Generation 5 - Accessories

P/N	Description	Cond.	PF-XS 520Plus	PF- 535-XL	PF- 5.020	PF- 5.050	PF- 5.015-XL	PF- 5.250	PF- 5.250P	PF- 5.400-UV
<b>Detector</b>										
FJ6720	Manometer ELSD	1	U			x	x		x	x
B4VBKO	Manometer MS	1	U			x	x		x	x
1H3490	Compressor for integrated ELSD without quiet cover	1	U			x	x		x	x
<b>Valves</b>										
BYNXZO	Purge Valve+kit (for Flash configuration) for PF-Gen5					x	x		x	
BYNY00	Purge valve+kit-v2 (for Flash configuration) for PF-5015-XL	1	U					x		
BYNY10	Purge valve+kit-v2 (for Prep configuration) for PF-Gen5	1	U				x		x	
BYNXN0	Purge valve+kit-v2 (for Peptide configuration) for PF-Gen5	1	U						x	
BX5KPO	6 way manual valve + kit	1	U	x						
<b>Column holder</b>										
AYHDX0	Integrated column holder for F0800 Flash column + fitting	1	u			x	x		x	
AYHDY0	Integrated column holder for 50 mm ID Prep column + fittings	1	u				x		x	
BW500	Integrated column holder for 50 mm ID Prep column + fittings	1	u							x
BX7HF0	Stand alone for Flash configuration + kit (up to F3000 format)	1	u	x	x	x	x	x		
DZ5201	Luer connections kit for large columns (F0800, F1600 & F3000 format)	1	u	x	x	x	x	x	x	
LV8210	Stand alone for Prep configuration + kit	1	u				x		x	x
B4WID0	Semi-Prep and Prep columns adaptation kit for PF-5.050	1	u				x			
<b>Fraction Collector</b>										
AYHDZ0	Extractor with 2 extraction tubes + kit (for PF-Gen5)	1	u			x	x	x	x	x
1R8570	Extractor with 2 extraction tubes + kit (for PF-XS520Plus)	1	u	x	x					
BS4YF0	Extraction tube + kit-V2 (for PF-Gen5)	1	u			x	x	x	x	x
BS4YG0	Extraction tube + kit-V2 (for PF-XS520Plus & PF-535-XL)	1	u	x	x					
1R8580	13 x 73 mm rack (for PF-XS520Plus)	1	u	x	x					
1R8590	13 x 100 mm rack (for PF-XS520Plus)	1	u	x	x					
1R8600	16 x 150 mm rack (for PF-XS520Plus)	1	u	x	x					
1R8610	18 x 150 mm rack (for PF-XS520Plus)	1	u	x	x					
1R8620	21 x 150 mm rack (for PF-XS520Plus)	1	u	x	x					
1R8630	25 x 150 mm rack (for PF-XS520Plus)	1	u	x	x					
1R8640	28 x 150 mm rack (for PF-XS520Plus)	1	u	x	x					
1R8650	29,5 x 200 mm rack (for PF-XS520Plus)	1	u	x	x					
1R8660	Rack for 250 mL Schott bottles (for PF-XS520Plus)	1	u	x	x					
B361D0	Funnel rack (for PF-XS520Plus)	1	u	x	x					
AYHE10	13 x 73 mm rack (for PF-Gen5) 56 tubes	1	u			x	x		x	x
AYHE30	13 x 100 mm rack (for PF-Gen5) 56 tubes	1	u			x	x		x	x
AYHE40	16 x 150 mm rack (for PF-Gen5) 44 tubes	1	u			x	x	x	x	x
AYHE50	18 x 150 mm rack (for PF-Gen5) 44 tubes	1	u			x	x	x	x	x
B30ST0	18 x 180 mm rack (for PF-Gen5) 44 tubes	1	u			x	x	x	x	x
AYHE60	21 x 150 mm rack (for PF-Gen5) 27 tubes	1	u			x	x	x	x	x
AYHE70	25 x 150 mm rack (for PF-Gen5) 16 tubes	1	u			x	x	x	x	x
AYHE80	28 x 150 mm rack (for PF-Gen5) 14 tubes	1	u			x	x	x	x	x
AYHE90	29,5 x 200 mm rack (for PF-Gen5) 14 tubes	1	u			x	x	x	x	x
AYHEA0	Rack for 250 mL Schott bottles (for PF-Gen5) 3 bottles	1	u			x	x	x	x	x
AYHE00	Funnel rack (for PF-Gen5)	1	u			x	x	x	x	x
BX5KY0	Bottle tray (Gen5)	1	u			x	x	x	x	x
FI201A	Tygon tubing SE-200 (OD 14,3 mm; ID : 9,5 mm), 15 meters	1	u			x	x	x	x	x
BH3901	Tubes 13 x 100 mm	1000	u	x	x	x	x		x	x
BX5400	Tubes 16 x 150 mm	1000	u	x	x	x	x	x	x	x
AW3842	Tubes 18 x 150 mm	500	u	x	x	x	x	x	x	x
1Q5350	Tubes 18 x 180 mm	1000	u	x	x	x	x	x	x	x
FL1120	Tubes 21 x 150 mm	500	u	x	x	x	x	x	x	x
BH3911	Tubes 25 x 150 mm	500	u	x	x	x	x	x	x	x
DT8250	Tubes 29,5 x 200 mm	50	u	x	x	x	x	x	x	x
<b>Unit Control</b>										
DV4120	Keyboard AZERTY	1	u	x	x	x	x	x	x	x
LO4300	Keyboard QWERTY	1	u	x	x	x	x	x	x	x
OA8280	Premium stylus	1	u	x	x	x	x	x	x	x
<b>Safety solvent</b>										
BODANO	Safety solvent caps kit - 4 units (for PF-Gen5 except PF-5.015-XL)	1	u			x	x		x	x
B1SW60	Safety solvent caps kit - tubing 3/16" - 4 units (for PF-5.015-XL)	1	u					x		

P/N	Description	Cond.	PF-XS 520Plus	PF- 535-XL	PF- 5.020	PF- 5.050	PF- 5.015-XL	PF- 5.250	PF- 5.250P	PF- 5.400-UV
B1SUJ0	Safety waste cap with container 5L + filter (for PF-Gen5)	1 u			x	x		x	x	x
B1SUK0	Safety waste cap with container 20L + filter (for PF-Gen5)	1 u			x	x	x	x	x	x
DV2760	Safety solvent caps kit - 4 units (for PF-Gen4, PF-XS520Plus)	1 u	x							
106930	Safety waste cap with container 5L + filter (for PF-Gen4, PF-XS520Plus & PF-535-XL)	1 u	x	x						
J04500	Safety waste cap with container 20L + filter (for PF-Gen4, PF-XS-520Plus & PF-535-XL)	1 u	x	x						
J01620	Safety solvent cap - tubing 3/16" (for PF-535-XL)	1 u		x						
<b>Loop Injection</b>										
AYHEJ0	100 µL stainless steel Loop with RFID tag	1 u				x		x	x	
AYHEK0	250 µL stainless steel Loop with RFID tag	1 u				x		x	x	
AYHEL0	500 µL stainless steel Loop with RFID tag	1 u				x		x	x	
AYHET0	1 mL stainless steel Loop with RFID tag	1 u				x		x	x	
AYHEU0	2 mL stainless steel Loop with RFID tag	1 u				x		x	x	
AYHEV0	5 mL stainless steel Loop with RFID tag	1 u				x		x	x	
AYHEW0	10 mL stainless steel Loop with RFID tag	1 u				x		x	x	
AYHEX0	20 mL stainless steel Loop with RFID tag	1 u				x		x	x	
AYHEY0	40 mL stainless steel Loop with RFID tag	1 u				x		x	x	
AYHEZ0	50 mL stainless steel Loop with RFID tag	1 u				x		x	x	
BWIRQ0	10 µL stainless steel Loop with RFID tag	1 u								x
PFAJD0	20 µL stainless steel Loop with RFID tag	1 u								x
BWIRRO	50 µL stainless steel Loop with RFID tag	1 u								x
BWIRSO	100 µL stainless steel Loop with RFID tag	1 u								x
BWIRTO	250 µL stainless steel Loop with RFID tag	1 u								x
BWIRU0	500 µL stainless steel Loop with RFID tag	1 u								x
BWIRVO	1 mL stainless steel Loop with RFID tag	1 u								x
PFAJEO	2 mL stainless steel Loop with RFID tag	1 u								x
BWIRWO	5 mL stainless steel Loop with RFID tag	1 u								x
BWIRX0	10 mL stainless steel Loop with RFID tag	1 u								x
BWIRYO	20 mL stainless steel Loop with RFID tag	1 u								x
<b>Others accessories</b>										
DZ7360	Ballasting kit for 1/8" tubing	5 u	x		x	x		x	x	x
DZ7361	Ballasting for 1/8" tubing	1 u	x		x	x		x	x	x
FV1290	Ballasting kit for 3/16" and 1/8" tubing	5 u		x						
B4VBPO	Ballasting for 3/16" tubing	5 u					x			
B4VBP1	Ballasting for 3/16" tubing	1 u					x			
B2JCJ0	Magic box Flash (tool box)	1 u	x							
B4WHZ0	Magic box Flash (tool box)	1 u		x						
AXF7I0	Magic box Flash (tool box)	1 u			x					
AXF7L0	Magic box Flash (tool box)	1 u						x		
AXF7P0	Magic box Flash (tool box)	1 u							x	
AXF7S0	Magic box Flash (tool box)	1 u					x			
AXF7T0	Magic box Flash (tool box)	1 u				x				
AXF7Q0	Magic box Flash (tool box)	1 u								x
IQ2360	Back pressure regulator 20psi + kit	1 u	x	x	x	x		x		
FV1160	Adaptation kit for F0800 & F1600 format column	1 u	x	x						
OC1570	Serial communication cable male/female (3 meters)	1 u	x	x						
OC1690	Serial communication cable female/female (3 meters)	1 u	x	x						
AYHF20	Trolley	1 u	x	x	x	x	x	x	x	x
PHONE0	Smartphone for TLC to Flash & Prep application	1 u	x	x	x	x	x	x	x	
TABLE0	Tablet for TLC to Flash & Prep application	1 u	x	x	x	x	x	x	x	
BFXLX0	ESD protection kit	1 u		x			x			
B1STZ0	Gen 5 demo kit consumables (with 4 compounds)	1 u			x	x	x	x	x	
B2Z110	Gen 5 demo kit consumables (without 4 compounds)	1 u			x	x	x	x	x	
DV5990	Phthalates sample 15 mL	1 u								
DV5991	Phthalates sample 5 mL	1 u								
1C6470	Apolaire C18 sample	1 u								
1N3640	Sample kit puriFlash MS (PF-155IHP-F0025 + natural products mix)	1 u								
BOE3S0	Nano ELSD qualification kit	1 u								
BXFX310	Sample kit puriFlash	1 u								

























# LC PURIFICATION

## puriFlash® Generation 5 - Wear parts

Picture	P/N	Cond.	Qty		PF- XS520+	PF- XS520 ULTRA	PF- 535XL	PF- 5020	PF- 5050	PF- 5250	PF- 5015XL	PF- 5250P	PF- 5400- UV
	GV1710	10 u	1	PEEK 1/4"-28 Long Nut For 1/8" Tubing (for GV1690)	x	x	x	x	x	x	x	x	x
	GV1700	10 u	1	PEEK 1/4"-28 Short Nut For 1/8" Tubing (for GV1690)	x	x	x	x	x	x	x	x	x
	GV1690	10 u	2	ETFE Ferrule with Stainless Steel Lock Ring for 1/8" tubing	x	x	x	x	x	x	x	x	x
	1B4260	10 u	1	Superflangeless male nut 1/16" Peek								x	
	1B4250	10 u	2	ETFE ferrule with stainless steel lock ring for 1/16" TUBING								x	
	JO8520	1 u	10	PEEK 5/16"-24 Nut +ETFE Ferrule for 3/16" Tubing			x				x		
	PFS740	1 u	2	Adapter PEEK Luer Lock M to 1/4"-28 F	x	x	x	x	x	x	x	x	
	PFAFA0	2 u	1	SP-1/4-28 Male to Luer Lock Male ID 2.4 mm	x	x	x						
	PFALGO	2 u	1	Adapter Stainless Steel Luer Lock F to 1/4"-28 M	x	x	x						
	PFA1D0	1 u	1	SP-Adapter 1/4" 28 Male- Luer Male ID 1.6 mm				x	x	x	x	x	
	U86322	1 u	2	Adapter 1/4"-28 F - Luer lock F			x	x	x	x	x	x	
	GV1730	10 u	1	Stainless Steel Nut for 1/8" tubing					x	x		x	
	GV1720	10 u	1	Stainless Steel Ferrule for 1/8" tubing					x	x		x	
	1A2510	10 u	1	SP Stainless Steel Nut for 1/16" TUBING								x	x
	1A2520	10 u	1	SP Stainless Steel ferrule for 1/16" TUBING								x	x
	AYQKF4	1 u	6	Prep adapter 10-32 Male to 5/16-24 Female						x		x	
	HO2560	1 u	1	Stainless Steel adapter for injection					x	x		x	
	181951	1 u	1	Stainless Steel adapter for injection									x
	163743	1 u	2	Stainless steel union 1/8"						x		x	
	NR0860	1 u	2	SP union volume mort 1/16" -1/16" peek seul									x
	468452	10 u	1	Raccord male universal 1/16" Peek uptisur									x
	1D3910	1 m	2	Spring for 1/8" OD tubing	x	x	x	x	x			x	x
	B45500	1 m	1	Spring for 3/16" OD tubing			x					x	
	AXG612	3 m	1	PTFE Tubing ESD Black 1.59 mm x 3.18 mm	x	x							
	AXG614	10 m	1	PTFE Tubing ESD Black 1.5 x 3.18 mm			x						
	7A1771	10 m	1	PTFE Tubing ESD Black 2.38 x 3.18 mm			x				x		
	7A1772	1.5 m	4	PTFE Tubing ESD Black 2.38 x 3.18 mm	x	x							
	7A1761	10 m	1	PTFE Tubing ESD Black 3.18 x 4.76 mm							x		



Picture	P/N	Cond.	Qty		PF- XS520+	PF- XS520 ULTRA	PF- 535XL	PF- 5020	PF- 5050	PF- 5250	PF- 5015XL	PF- 5250P	PF- 5400- UV
	7A1762	1.5 m	4	PTFE Tubing ESD Black 3.18 x 4.76 mm			x						
	L04703	5 m	1	ETFE Blue Tubing 1/8" OD - 1.6 mm ID				x	x	x	x	x	x
	L04690	1.5 m	1	ETFE Extruded Special Metric 2.4 mm ID 3.175 mm OD Blue Dark Opaque				x	x	x	x	x	x
	AS2W32	1.5 m	1	ETFE Extruded Special Metric 2.4 mm ID 3.175 mm OD Red Opaque				x	x	x	x	x	x
	AS2W42	1.5 m	1	ETFE Extruded Special Metric 2.4 mm ID 3.175 mm OD Green Opaque				x	x	x	x	x	x
	AS2W52	1.5 m	1	ETFE Extruded Special Metric 2.4 mm ID 3.175 mm OD Yellow Opaque				x	x	x	x	x	x
	AXEM01	1.5 m	1	ETFE Extruded Special Metric 1.6 mm Mm 3.175 mm Translucent Red				x	x	x	x	x	x
	AXEMP1	1.5 m	1	ETFE Extruded Special Metric 1.6 mm Mm 3.175 mm Translucent Green				x	x	x	x	x	x
	AXEMQ1	1.5 m	1	ETFE Extruded Special Metric 1.6 mm Mm 3.175 mm Translucent Yellow				x	x	x	x	x	x
	AS2IG1	1.5 m	1	ETFE Extruded Special Metric 1.6 mm Mm 3.175 mm Translucent Dark Blue				x	x	x	x	x	x
	U86654	1.5 m	1	SE-Tubing ETFE 1/8" OD - 1.6 mm				x	x	x	x	x	x
	803770	3 m	1	PEEK Tubing 1/8" OD - 1.6 mm ID						x			
	767140	3 m	1	Tube PEEK 1/16" 0,75 mm ID								x	
	676940	3 m	1	Tube PEEK 1/8" 0,75 mm ID								x	
	767140	3 m	1	Tube PEEK 1/16" x 0,75 mm (0.030")									x
	767130	3 m	1	Tube PEEK 1/16" x 0.50 mm (0.020")									x
	177893	3 m	1	Tube INOX 1/16" x 0.75 mm (0.030")									x
	186243	3 m	1	Tube INOX 1/16" x 0.50 mm (0.020")									x
	PFS920	1 u	1	SP-clapet - IIB89	X	X	X	X	X				
	PFS930	1 u	1	SP-clapet - IIB88	X	X	X	X	X	X		X	
	PFAJ50	1 u	1	SP-clapet 6,9 mm - BP000742									X
	PFS940	1 u	1	SP-joint piston - IID36	X	X	X	X	X	X		X	
	PFAJU0	1 u	1	SP-joint 6,4 mm - BP000061									X



# EVAPORATION

## puriFlash® XS-Vap

### puriFlash® XS-Vap

#### YOUR LABORATORY EVAPORATOR.

Xtra compact. Xtra intuitive.  
Xtra efficient. Xtra evaporation.

### Sample Concentration by Solvent Evaporation

With the puriFlash® XS-Vap, the concentration of your samples will no longer be a constraint! Integrating innovative technologies, evaporation times and gas consumption are reduced. Our evaporator is controlled by ultra-intuitive software to guarantee working comfort and time savings.

Its operation is simple: place your sample tubes to be concentrated in the unit, start the evaporation process and trust our nozzle height adjustment technology.

Within minutes, your solvent is evaporated and your compounds are ready for analysis.

The puriFlash® XS-Vap evaporator is at your side from start to finish during your concentrations / evaporations.



Whatever your field of activity (Research, Development, Quality Control, Process), the puriFlash® XS-Vap will become an essential instrument in your laboratory. The puriFlash® XS-Vap is designed to be much more than a simple solvent evaporator! Thanks to the height adjustment of the nozzles, the gas consumption is drastically reduced and the evaporation speed increases without losing your molecules.



#### PLUG & PLAY: Plug in. Use.

Take advantage of the many features of your solvent evaporator without delay.

The puriFlash® XS-Vap can be up and running in minutes, making your work easier and saving you time every day.



#### How to check the evaporation process?

The whole device is translucent, allowing you to view the samples during the evaporation process and to adjust the nozzles position according to the solvent level in the tubes.

### Technical Specifications

- Evaporation capacity:  
Up to 90 samples in parallel.
- Sample volume:  
From a few milliliters to 250 mL per position.
- Gas consumption:  
Use of nitrogen or compressed air to supply the device at a pressure of 1-3 bar.  
Consumption is less than 1L/min per position.
- Heating temperature:  
Ambient up to 90°C
- Nozzles adjustment:  
The level of the nozzles is manually adjustable according to the volume and the evaporation speed of the solvent.
- Lights:  
Different lights visually indicate the stage of operation of the device.
- Control software:  
Intuitive control software integrated into a touch screen control.
- Compatibility:  
The puriFlash® XS-Vap is compatible with all types of solvents.  
Our puriFlash® Gen 5, Gen 4 and XS racks are compatible with the device allowing direct evaporation of the tubes collected in the rack.
- Tube dimensions:  
Vial: 2 mL (12x32 mm); 4 mL (15x45 mm); 8 mL (17x60 mm); Eppendorf 2 mL;  
Tube: 13x100 mm; 16x100 mm; 16x150 mm; 18x150 mm  
Glass tube: 250 mL with dry end-point; 250 mL with 1 mL end-point
- Dimension & Weight:  
Width 37 cm x Depth 40 cm x Height 60 cm - Weight: 35 kg



Certified  
CE & UL

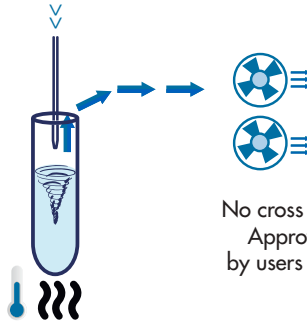
**Operating**

Gas flowrate  
(N2 or Air compressed ; <1L/min per nozzle)

No cross contamination  
Approval & tested  
by users & our partner



Compatible for PFAS analysis



No cross contamination  
Approval & tested  
by users & our partner

Water heats the sample tube

**Nozzle adjustment technology**

Reduce gas consumption up to ~50%  
Time-Saving up to 40% to evaporate your samples

Step 1  
Set the pressure  
Start your evaporation



Step 2  
Move down manually the nozzle  
Efficient Evaporation Rate  
Gas consumption decreases



Step 3  
Evaporation finished



**User feedback**

Thanks to our puriFlash XS-Vap for a volume of 10mL solvent evaporated  
Evaporation time-saving by 50%

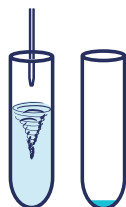
	Competitor	puriFlash® XS-Vap	
	Customer results	Customer results Interchim	Customer results
Methanol Bath Temp.: 35°C	After 30min Remain 5 mL in tube	29 min Complete dry	✓ 30 minutes Complete dry
Acetonitrile Bath Temp.: 35°C	After 45min Remain 5 mL in tube	40 min Complete dry	✓ 45 min Complete dry
ACN/Water 80/20 Bath Temp.: 45°C	4h Complete dry	ACN/Water 70/30 1h10 min Complete dry	✓ 1h30 Complete Dry



# EVAPORATION

## puriFlash® XS-Vap

### Low gas consumption



Gas flowrate <math>< 1\text{L}/\text{min}</math> per position (nitrogen)

Number sample evaporated : 56

Gas Pressure regulated: 1 bar

Total Gas Consumption: 40L/min  $\rightarrow$  0,7L/min (per nozzle)

### Evaporation rate table

Evaporation from 10mL up to complete dry  
16x100mm tubes - Temp.Bath : 40°C - Under N2 gas @1bar

Ethyl acetate  
 $\rightarrow$  17min\*

Acetonitrile  
 $\rightarrow$  30min\*

Hexane  
 $\rightarrow$  9min\*

Ethanol  
 $\rightarrow$  40min\*\*

Methanol  
 $\rightarrow$  28min\*\*

\*: evaporation time to complete dry

### Select your puriFlash® XS-Vap Configuration rate table

Choose your accessories according to your needs

For vials & test tubes

Manifold head P/N : EVAA20	Nozzles P/N : EVAA50	Adapter P/N : EVAA10	Racks

For 250mL glassware

Manifold head P/N : EVAA40	Glassware P/N : B684D0 or BVLGH0	Racks P/N : EVAB90

P/N	Description	Packaging
<b>Systems</b>		
EVAA00	puriFlash® XS-VAP evaporator_220-240V	1
EVAA01	puriFlash® XS-VAP evaporator_100-120V	1
<b>Accessories</b>		
EVAA10	Adapter for puriFlash® rack XS G4 G5 for puriFlash® XS-VAP	1
EVAA20	Manifold 56 positions for test tubes 13, 16, 18mm OD with GRID for puriFlash® XS-VAP	1
EVAA30	Manifold 90 positions for test tubes 13mm OD with GRID for puriFlash® XS-VAP	1
EVAA40	Manifold 6 positions for 250mL glasswares for puriFlash® XS-VAP	1
EVAA50	Nozzles for manifold 56 & 90 positions for puriFlash® XS-VAP	1x14
EVAA60	Tool to connect & disconnect nozzles from manifold for puriFlash® XS-VAP	1
EVAA70	Fume enclosure with venting hose 4M for puriFlash® XS-VAP	1
EVAA80	Plate for water bath vapor for puriFlash® XS-VAP	1
XZ2190	Power cord EU for puriFlash® XS-VAP	1
XZ2270	Power cord UK for puriFlash® XS-VAP	1
EVAA90	Power cord CH for puriFlash® XS-VAP	1
EVAB00	Power cord CHINA for puriFlash® XS-VAP	1
EVAB10	Power cord INDIA for puriFlash® XS-VAP	1
XZ2340	Power cord US for puriFlash® XS-VAP	1
EVAB30	Rack 56 positions 15mL 16x100mm test tubes for puriFlash® XS-VAP	1
EVAB40	Rack 56 positions 10mL 13x100mm test tubes for puriFlash® XS-VAP	1
EVAB50	Rack 56 positions 2mL 12x32mm vials for puriFlash® XS-VAP	1
EVAB60	Rack 56 positions 2mL centrifuge tubes for puriFlash® XS-VAP	1
EVAB70	Rack 56 positions 4mL 15x45mm vials for puriFlash® XS-VAP	1
EVAB80	Rack 56 positions 8mL 17x60mm vials for puriFlash® XS-VAP	1
1R8580	13x73mm rack (for PF XS 520 Plus)	1
1R8590	13x100mm rack (for PF XS 520 Plus)	1
1R8610	18x150mm rack (for PF XS 520 Plus)	1
PF4391	18x150mm rack (for PF GEN 4)	1
AYHE50	18x150mm rack (for PF GEN 5)	1
PF4381	16x150mm rack (for PF GEN 4)	1
AYHE40	16x150mm rack (for PF GEN 5)	1
AYHE30	13x100mm rack (for PF GEN 5)	1
EVAB90	Rack 6 positions for 250mL glasswares for puriFlash® XS-VAP	1
EVAC00	Flowmeter for puriFlash® XS-VAP	1
BVLGH0	250mL glasswares with 1mL end point for puriFlash® XS-VAP	1
B684D0	250mL glasswares dry end point	1x10u
AXETN5	Test tubes 12,00x75mm borosilicate glass ExpP51 6mL without RIM - round bottom - 0,5-0,6mm	4x250
B69U00	Test tubes 12,00x75mm borosilicate glass ExpP33 6mL without RIM - round bottom - 0,9-1,0mm	100
AXETO5	Test tubes 13,00x100mm borosilicate glass ExpP51 10mL without RIM - round bottom - 0,5-0,6mm	4x250
B4G080	Test tubes 13,00x100mm amber borosilicate glass ExpP51 10mL without RIM - round bottom	4x250
B69U60	Test tubes 14,00x130mm borosilicate glass ExpP33 16mL without RIM - round bottom - 0,8-0,9mm	100
B6AW80	Test tubes 15,00x85mm borosilicate glass ExpP51 11mL without RIM - round bottom - 0,5-0,6mm	4x250
AXETP5	Test tubes 16,00x100mm borosilicate glass ExpP51 15mL without RIM - round bottom - 0,5-0,6mm	4x250
B4VV70	Test tubes 16,00x100mm borosilicate glass ExpP33 15mL without RIM - round bottom - 1,1-1,2mm	100
AXETR5	Test tubes 16,00x125mm borosilicate glass ExpP51 19mL without RIM - round bottom - 0,5-0,6mm	4x250
B69U80	Test tubes 16,00x130mm borosilicate glass ExpP33 20mL without RIM - round bottom - 1,1-1,2mm	100
AXETS5	Test tubes 16,00x150mm borosilicate glass ExpP51 23mL without RIM - round bottom - 0,5-0,6mm	4x250
AXETT5	Test tubes 18,00x150mm borosilicate glass ExpP51 28,5mL without RIM - round bottom - 0,8mm	4x125
1A0132	Empty centrifuge tubes 15mL conical graduated with blue caps non sterile	1000
390191	Tube inox 1/16" precoup 0,50mm ID 10cm	1



# EVAPORATION

## Evaporator puriVap-6™

### Gas Blowdown Evaporator

Sample Concentration by Solvent Evaporation

- 6 channels to run up to 6 samples (independent or simultaneous)
- Sample volumes from 2mL up to 60mL
- PID temperature control with digital display up to 100°C
- Temperature increases quickly in the first minutes (up to 4°C/min)
- Dedicated nitrogen flow regulator control for each sample
- Nitrogen blow in combination of heating concentration mode
- Possibility to choose the best position of nitrogen needle to ensure the most efficient evaporation
- Anti-corrosive material (PTFE)
- "Open view" to control sample volume level during the evaporation process
- Dry aluminum block heating mode to avoid potential water vapor interference
- Small temperature difference between channels (RSD: 0;11%)
- Low gas consumption (nitrogen gas supply: 1-2 bar max | flow rate: 7-8L/min)



### Compatible vial sizes

Vial size	Volume
28 x 140 mm	60 mL
28 x 95 mm	40 mL
40 mL - 1 mL tail tube	40 mL
18 x 150 mm	25 mL
16 x 150 mm	22 mL
16 x 100 mm	12 mL
13 x 100 mm	10 mL
12 x 32 mm	2 mL

### Solvent evaporation time - Sample volume: 5 mL - N<sub>2</sub> : 1 bar

Solvent	Boiling point (°C)	Setting temp. (°C)	Evaporation time (min)
Methanol	64.7	40	21
Acetonitrile	82	50	19
Ethyl acetate	77.1	50	14
Hexane	68	55	8
Methylene chloride	39.6	40	7
Water	100	90	50

P/N	Description	Qty
puriVap-6™ AWZ5R0	puriVap6™ Including: 1x gas tubing 6 x 40 mL vials 6 x nozzles (AWZ7K0)	1 x 1 u
Accessories		
AWZ7K0	Nozzles	1 x 1 u
AWZ7L0	Spacer M/F M4 L40	1 x 1 u
AWZ7M0	Aluminum block OD 18 mm	1 x 1 u
AWZ7P0	Aluminum block 16 mm - Vials 2 mL	1 x 1 u
AWZ7Q0	Aluminum block 13 mm - Vials 2 mL	1 x 1 u

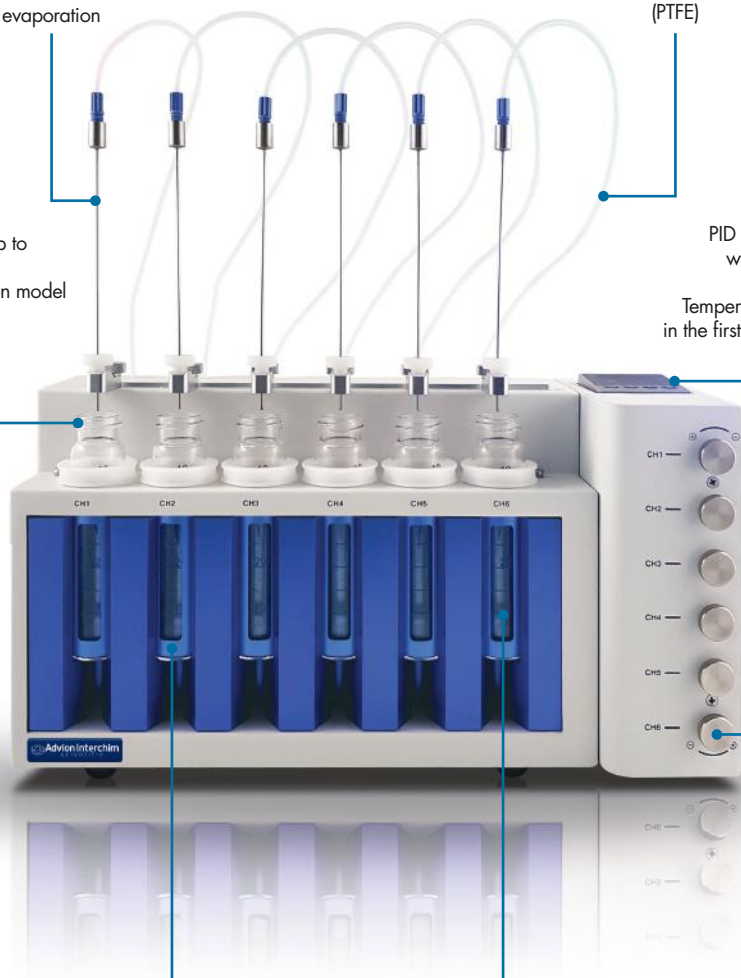
# puriVap-6™

Nitrogen blow in combination  
of heating concentration mode  
Ability to choose the best  
position of nitrogen needle  
to ensure the most efficient  
evaporation

Anti-corrosive material  
(PTFE)

Ability to run up to  
6 samples  
Parallel concentration model

PID temperature control  
with digital display  
Up to 100°C  
Temperature increases quickly  
in the first minutes (up to 4°C/min)



Dry aluminum block heating mode to avoid  
potential water vapor interference  
Small temperature difference between channels  
(RSD: 0.11%)

6 channels  
(independent or simultaneous)  
Dedicated nitrogen flow regulator  
control for each sample



## PURIFLASH® R-VAP

### YOUR LABORATORY ROTARY EVAPORATOR

Super intuitive. Ultra-efficient.  
Simply indispensable

#### Sample Concentration by Solvent Evaporation

With the puriFlash® R-Vap, concentrating your samples is a snap!  
With its robust and versatile technology, the puriFlash® R-Vap gives you maximum flexibility by allowing you to evaporate your solvents in flasks up to 3L.

Its two-step operation is extremely simple and intuitive:

- Place your sample to be concentrated in the flask,
- Start the vacuum evaporation process.

Rely on its undoubtable efficiency! In a few moments, your solvent is evaporated and collected by condensation and your sample is ready for analysis.

The puriFlash® R-Vap will also prove to be the instrument of choice for processing your fractions collected by our purification systems.

Benefit from all the high quality requirements of Advion Interchim Scientific with this rotary evaporator as compact as its price.

A laboratory essential that will be with you every day, for a very long time.

Whatever your field of activity (Research, Development, Quality control, Process), the puriFlash® R-Vap will become an essential instrument in your laboratory. The puriFlash® R-Vap is much more than a simple solvent evaporator thanks to a complete modular configuration and a wide range of accessories available.



puriFlash® C-500  
Chiller  
Cooling system  
WxDxH : 25x48x49cm

puriFlash® R-Vap  
Rotary evaporator  
& heating bath  
WxDxH : 51x43,5x81cm

puriFlash® P-020  
Vacuum pump  
WxDxH : 18x31x24cm

D[total]: 50-60cm ; W[total]: 120-130cm ; H[total]: 81cm



Rotary Evaporator puriFlash® R-VAP - Technical Specifications

**Rotary evaporator:**

- Flask capacity: up to 3L
- Rotation speed range 20-300 RPM
- Rotation: clockwise/counterclockwise
- Option: plastic coating
- Immersion angle: 0 to 60°

**Vacuum pump:**

- P-020: Manometer included with manual vacuum regulator – flow rate: 18L/min max, vacuum pressure: 20mbar
- P-005: manual vacuum regulator (Optional Electronic vacuum controller) flow rate: 20L/min max, vacuum pressure: 5mbar
- P-250: manometer included – flow rate: 30L/min max, vacuum pressure: 250mbar

**Heating bath:**

- Capacity bath: 5L
- Temperature range: ambient to 230°C

**Chiller C-500:**

- Temperature range: -5°C to 35°C
- Temperature stability: +/- 0.3°C
- Cooling capacity: 500W at 25°C
- Pump capacity: 3L/min at 10psi

P/N	Description
<b>puriFlash® R-VAP</b>	
REAA10	puriFlash® R-Vap Manual Lift Vertical Condenser 220-240V
REAA11	puriFlash® R-Vap Manual Lift Vertical Condenser 110-120V
REAA20	puriFlash® R-Vap Motorized Lift Vertical Condenser 220-240V
REAA30	puriFlash® R-Vap Motorized Lift Vertical Condenser 110-120V
REAH90	puriFlash® R-Vap manual lift vertical condenser + cold finger condenser 220-240V
REAH91	puriFlash® R-Vap manual lift vertical condenser + cold finger condenser 110-120V



**puriFlash® R-VAP plastic coated**

REAI20	puriFlash® R-VAP manual lift vertical condenser plastic coated
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**puriFlash® R-Vap & Vacuum pump kit**

REAA00-KIT	puriFlash® R-Vap Manual lift (REAA10) + Pump P-020 (VPAA10) 220-240V kit
REAA01-KIT	puriFlash® R-Vap Manual lift (REAA11) + Pump P-020 (VPAA11) 110-120V kit

Packing list delivered with the puriFlash® R-Vap:

- (1) Evaporation Flask 1000mL volume - 29/32 connection size with plastic clamp (P/N: B4RE90);
- (1) Receiving Flask 1000mL volume - 35/20 round connection size with stainless steel clamp (P/N: REAC10);
- (1) Vertical condenser 1200cm² (P/N: REAA40);
- (1) Heating bath 5L;
- (1) Power cord (EU: 220-240V ou US: 110-120V; other power cord on demand)



**puriFlash® R-VAP plastic coated + Vacuum pump kit**

REAJ50-KIT	puriFlash® R-Vap Manual lift plastic coated (REAI20) + Pump P-020 (VPAA10) 220-240V kit
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**puriFlash® Vacuum pump**

VPAA00	puriFlash® P-005 20LPM 5mbar 220-240V
VPAA01	puriFlash® P-005 20LPM 5mbar 110-120V
VPAA10	puriFlash® P-020 18LPM 20mbar 220-240V
VPAA11	puriFlash® P-020 18LPM 20mbar 110-120V
VPAA20	puriFlash® P-250 30LPM 250mbar 220-240V
VPAA21	puriFlash® P-250 30LPM 250mbar 110-120V
REAH50	R-Vap Electronic vacuum controller - 220V
REAH60	R-Vap Electronic vacuum controller - 110V

Packing list delivered with puriFlash® Vacuum pump:

- (1) Tube 1.2m;
- (1) Power cord (EU: 220-240V or US: 110-120V); other power cord on demand.



**puriFlash® C-500**

CHAA00	puriFlash® C-500 - 5°C + 35°C 500W 220-240V
CHAA01	puriFlash® C-500 - 5°C + 35°C 500W 110-120V

Packing list delivered with puriFlash® C-500

- (1) Set connectors with different sizes
- (1) Power cord (EU: 220-240V ou US: 110-120V; other power cord on demand)



## Rotary Evaporator puriFlash® R-VAP - Accessories

P/N	Description
REAA40	Vertical condenser column 1200cm <sup>2</sup> condensing surface for puriFlash® R-Vap
REAI50	Vertical condenser column + plastic coated 1200cm <sup>2</sup> condensing surface for puriFlash® R-Vap
REAA50	Diagonal condenser column 1200cm <sup>2</sup> condensing surface for puriFlash® R-Vap
REAI60	Diagonal condenser column 1200cm <sup>2</sup> + plastic coated condensing surface for puriFlash® R-Vap
REAA60	Vertical condenser column 1500cm <sup>2</sup> condensing surface for puriFlash® R-Vap
REAI70	Vertical condenser column 1500cm <sup>2</sup> + plastic coated condensing surface for puriFlash® R-Vap
REAA70	Diagonal condenser column 1500cm <sup>2</sup> condensing surface for puriFlash® R-Vap
REAI80	Diagonal condenser column 1500cm <sup>2</sup> + plastic coated condensing surface for puriFlash® R-Vap
REAA80	Secondary condenser column plus 250mL receiving flask for puriFlash® R-Vap
REAG90	Cold-finger condenser - 29/32 connection size for puriFlash® R-Vap
REAA90	Liquid bath safety shield for puriFlash® R-Vap
REAB00	Evaporation flask 50mL volume - 29/32 connection size for puriFlash® R-Vap
REAI90	Evaporation flask + plastic coated 50mL - 29/32 connection size for puriFlash® R-Vap
B68FT0	Evaporation flask 100mL volume - 29/32 connection size for puriFlash® R-Vap
B4RE70	Evaporation flask 250ml volume - 29/32 connection size for puriFlash® R-Vap
REAJ00	Evaporation flask + plastic coated 250mL - 29/32 connection size for puriFlash® R-Vap
B4RE80	Evaporation flask 500ml volume - 29/32 connection size for puriFlash® R-Vap
REAJ10	Evaporation flask + plastic coated 500mL - 29/32 connection size for puriFlash® R-Vap
B4RE90	Evaporation flask 1000ml volume - 29/32 connection size for puriFlash® R-Vap
REAI40	Evaporation flask + plastic coated 1000mL volume - 29/32 connection size for puriFlash® R-Vap
REAB10	Evaporation flask 2000ml volume - 29/32 connection size for puriFlash® R-Vap
REAJ20	Evaporation flask + plastic coated 2000mL - 29/32 connection size for puriFlash® R-Vap
REAB20	Evaporation flask 3000ml volume - 29/32 connection size for puriFlash® R-Vap
REAJ30	Evaporation flask + plastic coated 3000mL - 29/32 connection size for puriFlash® R-Vap
REAB30	Heart-shaped flask - volume 50mL - join size 24/29 for puriFlash® R-Vap
REAB40	Heart-shaped flask - volume 100mL - join size 24/29 for puriFlash® R-Vap
REAB50	Heart-shaped flask - volume 50mL - join size 19/26 for puriFlash® R-Vap
REAB60	Trap ball 100ml volume - 29/32 to 24/29 connection size for puriFlash® R-Vap
REAB70	Receiving flask - volume 50mL - joint size 35/20 for puriFlash® R-Vap
REAJ40	Receiving flask + plastic coated glass - volume: 50mL - joint size: 35/20 for puriFlash® R-Vap
REAH10	Receiving flask + plastic coated - volume: 100mL - joint size: 35/20 for puriFlash® R-Vap
REAH20	Receiving flask + plastic coated - volume: 250mL - joint size: 35/20 for puriFlash® R-Vap
REAH30	Receiving flask + plastic coated - volume: 500mL - joint size: 35/20 for puriFlash® R-Vap
REAH00	Receiving flask + plastic coated - volume: 1000mL - joint size: 35/20 for puriFlash® R-Vap
REAH40	Receiving flask + plastic coated - volume: 2000mL - joint size: 35/20 for puriFlash® R-Vap
REAB80	Receiving flask - volume: 100mL - joint size: 35/20 for puriFlash® R-Vap
REAB90	Receiving flask - volume: 250mL - joint size: 35/20 for puriFlash® R-Vap
REAC00	Receiving flask - volume: 500mL - joint size: 35/20 for puriFlash® R-Vap
REAC10	Receiving flask - volume: 1000mL - joint size: 35/20 for puriFlash® R-Vap
REAC20	Receiving flask - volume 2000mL - joint size 35/20 for puriFlash® R-Vap
REAC30	50mL volume - n°5 flask connections - 29/32 to 24/29 connection size for puriFlash® R-Vap
REAC40	25mL volume - n°5 flask connections - 29/32 to 24/29 connection size for puriFlash® R-Vap
REAC50	10mL volume - n°5 flask connections - 29/32 to 19/29 connection size for puriFlash® R-Vap



## Rotary Evaporator puriFlash® R-VAP - Accessories

P/N	Description
REAC60	Extension fitting for 50 to 250mL rotation flask for puriFlash® R-Vap
B68FS0	Reduction and expansion adapter - 29/32 to 24/29 size for puriFlash® R-Vap
B68FR0	Reduction and expansion adapter - 29/32 to 19/26 size for puriFlash® R-Vap
B68FQ0	Reduction and expansion adapter - 29/32 to 14/23 size for puriFlash® R-Vap
B67MD0	Clips ns 10 green for puriFlash® R-Vap
B67ME0	Clips ns 12.5 violet for puriFlash® R-Vap
B67M90	Clips ns 14.5 yellow for puriFlash® R-Vap
B67MA0	Clips ns 18.8 blue for puriFlash® R-Vap
B67MB0	Clips ns 24 green for puriFlash® R-Vap
B67MC0	Clips ns 29.2 red for puriFlash® R-Vap
B67MF0	Clips ns 34.5 orange for puriFlash® R-Vap
B67MG0	Clips ns 40 yellow for puriFlash® R-Vap
B67MH0	Clips ns 45 brown for puriFlash® R-Vap
B68QT0	Gas washing bottle with drechsel bottle head without filter disc 500mL for puriFlash® R-Vap
BH4RJ0	Gas washing bottle with drechsel bottle head with filter disc 500mL for puriFlash® R-Vap



**Unrivalled Utility and Flexibility**

The **expression**<sup>®</sup> family of compact mass spectrometers was developed with maximum versatility in mind. They allow users to switch rapidly between the many different sample introduction techniques required throughout the chemist's workflow; from simple direct probe analysis to ultra-high performance liquid chromatography and prep-scale purification.



ASAP<sup>®</sup>: Atmospheric Solids Analysis Probe



Plate Express<sup>™</sup>: TLC/CMS Mass Analysis of TLC spots



AVANT<sup>™</sup> Chromatography Systems: (U)HPLC/CMS



iASAP: Direct Analysis of Air-Sensitive Compounds



Direct Injection (FIA)

**High performance compact mass spec designed especially for chemists**



vAPCI: Volatile APCI for Gas Analysis



Flow Chemistry Monitoring & Automated, RealTime, Optimization



Purification by Flash, SFC, or Prep-LC/CMS

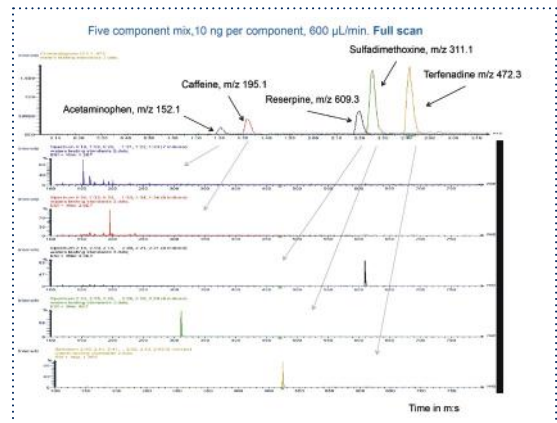
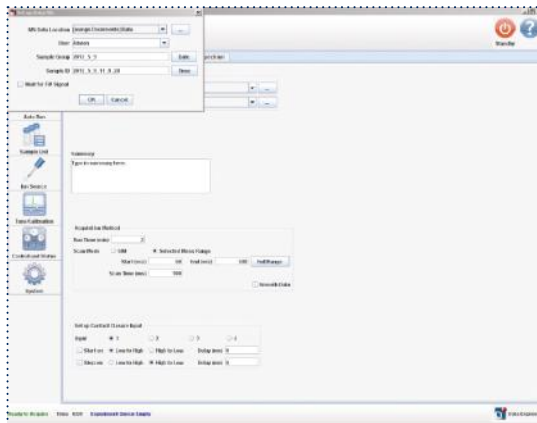


Touch Express<sup>™</sup> Open Port Sampling Interface (OPSI)

### Features:

- Available sources: ESI, ESI-OPSI, APCI & ASAP
- Single quadrupole
- Simultaneous positive/negative ionization
- Flow rate: ESI: 10  $\mu\text{L}/\text{min}$  to 1  $\text{mL}/\text{min}$   
APCI: 10  $\mu\text{L}/\text{min}$  to 2  $\text{mL}/\text{min}$
- Masse Range ( $m/z$ ): **expression**<sup>®</sup> S  $m/z$  1 200  
**expression**<sup>®</sup> L  $m/z$  2 000
- Scan Speed: 10,000  $m/z$  units/sec
- Sensitivity: 10 pg Reserpine (FIA - 5  $\mu\text{L}$  injection at 100  $\mu\text{L}/\text{min}$ )  
100:1 S/N (RMS) with SIM  $m/z$  609.3
- Resolution: 0.5 - 0.7  $m/z$  units (FWHM) at 1000  $m/z$  units sec<sup>-1</sup>
- Accuracy: 0.1  $m/z$
- Nitrogen consumption 99% pure: 10 L/min at 5.5 bar
- Dimensions: 65 (h) x 55 (d) x 27.5 (w) cm
- Weight: 32 kg

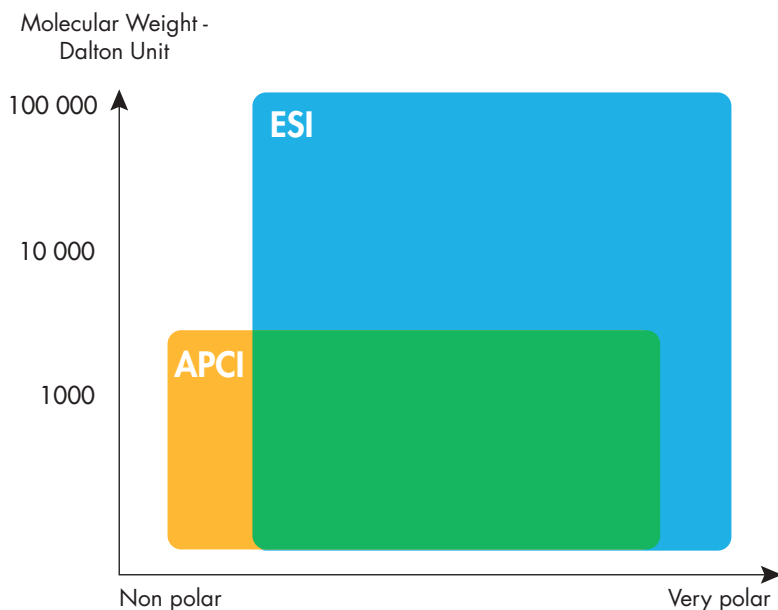
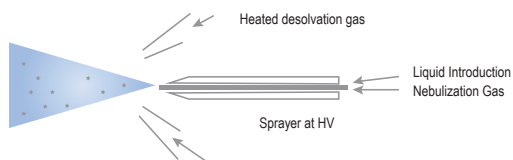
Description	P/N	Qty
<b>expression</b> <sup>®</sup> CMS-S $m/z$ 1200	CMS-S-01	1 u
<b>expression</b> <sup>®</sup> CMS-L $m/z$ 2000	CMS-L-01	1 u



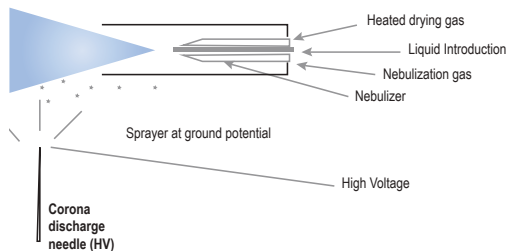
**Source**

Automatic source recognition

Quick and easy to change

**ELECTROSPRAY IONIZATION (ESI)**

Applications:  
Proteins, peptides, sugars, carbohydrates, PPG

**ATMOSPHERIC PRESSURE IONIZATION SOURCE (APCI)**

Applications:  
Small molecules (< 1000 u) volatile, polar and neutral molecules, steroids...

Applications:  
Most drugs, metabolites,  
aromatic compounds containing at least one  
ionizable functional group ( $\text{NH}_2$ ,  $\text{CO}_2\text{H}$ ,  $\text{SO}_3\text{H}$ ,  $\text{Ph-OH}$ ...)

## Full-Feature & Easy-to-Use Software for Simplified Operation and Compound Identification

Advion Interchim Scientific's Full Suite of software products for the *expression*<sup>®</sup> CMS.

Advion Interchim Scientific<sup>®</sup> offers a full-range of software options for detection to quantitation and more, including:



### Mass Express

A user-friendly, intuitive software platform for instrument control and data acquisition.



### Data Express

A full feature data processing package to interpret and present mass spectral and chromatographic information in the clearest form using the fewest possible steps.



### Quant Express

Quant Express is an add-on to the Mass Express software suite that provides a complete, detailed quantitation application.



### LC Express

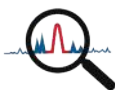
LC Express provides a seamless interface with the Advion Interchim Scientific AVANT<sup>™</sup> (U) HPLC system, with additional capabilities to interface with nearly all LC systems on the market, including Agilent ICF and Data Apex Clarity drivers.



### CheMS

The CheMS user interface allows users to quickly select the workflow and type of compound they wish to analyze in just a few clicks of the mouse, automatically optimizing the ion source and data acquisition parameters.

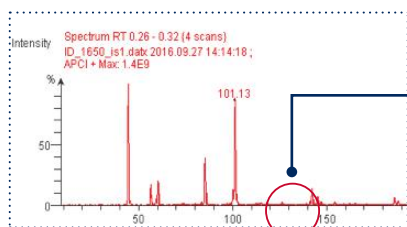
- Single click an instrument icon to set-up, and switch between, a range of sample introduction techniques
- Simplified interpretation of mass spectra with automatic identification of peaks related to your compound of interest
- Works alongside Mass Express for fully capable and versatile instrument control and data processing



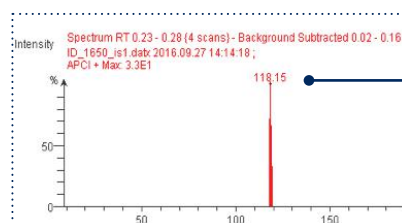
### Peak Express<sup>™</sup>: See more

Introducing a revolutionary new way to view mass spectral data (US patent 9,779,922). Peak Express calculates the relative change of signals and will detect the elution of even the smallest peak against a much larger background of chemical noise, and tell you the  $m/z$ .

- Find your compound even in dirty matrices
- Find your compound without knowing its  $m/z$  in advance.
- Find minor components in complex mixtures
- Acquire XIC-quality data while collecting the entire mass range



Cannot see your compound because of chemical noise



Only your compound



### The Industry's Broadest Range of Innovative Sampling Technique

Advion Interchim Scientific provides an extensive range of innovative sample introduction systems that are fully integrated with the **expression**<sup>®</sup> CMS to provide solutions for all the chemist's needs. From the simplest, fastest direct probe analysis requiring no sample preparation to ultra-high performance compound separation with state-of-the-art liquid chromatography systems.

### Plate Express™ TLC Plate Reader

Plate Express provides a simple, automated means of obtaining mass spectra directly from TLC plates, combined with Advion Interchim Scientific's **expression**<sup>®</sup> compact mass spectrometer creating a technique known as TLC/CMS. Using this technique chemists can quickly and confidently identify products even in complex mixtures without additional sample preparation.

- Mass analysis of spots in <1 minute, avoiding system bottlenecks
- Avoid the risk of overloading the mass spectrometer - TLC spots contain the ideal amount of sample for mass spectrometry
- Software controlled - spectra obtained within a few mouse clicks
- Simplify the process of obtaining spectra - ideal for multi-user labs

### ASAP<sup>®</sup>: Atmospheric Solids Analysis Probe

The ASAP direct analysis probe provides fast, simple, reliable mass analysis of solid and liquid samples without the need for sample preparation. The chemist simply dips the probe in a liquid, or rubs it on a solid sample, and inserts it through a port directly into the ion source yielding results in seconds. Ideal for:

- Reaction monitoring
- Compound identification
- Food safety
- Forensics
- Natural products
- Tablets



### AVANT™ HPLC & UHPLC Chromatography Systems

Advion Interchim Scientific's range of AVANT, high performance, liquid chromatography provides seamlessly integrated LC/CMS under the full control of Advion Interchim Scientific's simple, intuitive Mass Express software suite.

From the simplest manual injection HPLC to a fully automated, streamlined UHPLC system and everything in-between, the AVANT series can be configured to fit your analytical requirements and your budget.

The Advion Interchim Scientific AVANT series offers:

- HPLC and UHPLC
- UV and UV-Vis DAD
- Column oven
- Autosamplers with optional cooling
- Modular and stackable design
- High-pressure mixing with optional degassing



### vAPCI: Volatile APCI Headspace & Gas-Phase Analysis

Volatile Atmospheric Pressure Chemical Ionization (vAPCI) combined with Advion Interchim Scientific's **expression**<sup>®</sup> CMS is a fast and easy method to measure gases such as headspace and breath. The vAPCI provides a sample inlet linked by a heated transfer line to an APCI ion source, where the sample is ionized by corona discharge. vAPCI enables chemists to:

- Analyze Volatile Organic Compounds (VOCs) directly in the gas phase
- Solvent-free APCI allows a greater range of compounds to be ionized compared to traditional APCI ion sources

### iASAP: Inert Atmospheric Solids Analysis Probe

The inert ASAP<sup>®</sup> (iASAP) is a modification of the ASAP<sup>®</sup> technique, allowing easy sampling of air-sensitive compounds, such as metal catalysts and organometallics, from reactions that are carried out in a glove box or Schlenk line to prevent oxidation. The iASAP probe is designed to provide:

- Safe transfer of air sensitive samples to CMS at the bench
- Mass analysis without sample oxidation
- Answers in <30s
- No sample preparation required

### Touch Express<sup>™</sup> Open port sampling interface (OPSI)

The Touch Express<sup>™</sup> Open Port Sampling Interface (OPSI), is designed for simple sampling of surfaces, solids, liquids and sample preparation tips and fibers.

Paired with the electrospray ion source of the **expression**<sup>®</sup> Compact Mass Spectrometer, the solvent forms a meniscus at the open port before being drawn down the inner path into the electrospray ion source of the mass spectrometer under the Venturi effect of the nebulization gas. Any soluble sample touching the port is analyzed by the mass spectrometer in just seconds. Touch Express OPSI offers a fast assay benchtop solution for solid, liquids, and surfaces in a small-footprint, easy-to-use system.

The OPSI source is a unique, prep-free sample technique that offers:

- Compound ID and impurity detection from almost any surface
- Direct assays from sample preparation tips and SPME fibers
- Easy screening applications for drug research, food safety, environmental, forensics
- Large molecule applications including proteins, peptides, oligonucleotides and polymers



# MASS SPECTROMETRY

## Detector - Mass Spectrometer

Description	P/N
expression <sup>®</sup> CMS	
expression <sup>5</sup> Compact Mass Spectrometer m/z 1200	CMS-S01
expression <sup>1</sup> Compact Mass Spectrometer m/z 2000	CMS-L01
<b>Roughing pump</b>	
Rotary vane pump with oil mist filter and oil return - included with CMS	PMP101
Dry scroll pump - upgrade to oil-free backing pump in place of rotary vane pump	PMP103
<b>Sources</b>	
APCI Source	IS-APCI-S01
ESI source	IS-ESI-S01
APCI / ASAP <sup>®</sup> source	IS-ASAP-S02
iASAP source	IS-ISAP-S02
ASAP <sup>®</sup> /iASAP source	IS-IASAP-S02
vAPCI source	IS-VAPCI-S01
Positive pressure kit for use with VAPCI-S01 ion source	PPK-VAPCI
ESI source + OPSI port	OPSI+IS-S01
ESI source for OPSI	IS-OPSI-S01
OPSI port	OPSI-001
<b>Sources upgrade</b>	
ASAP <sup>®</sup> ion source upgrade for existing APCI and vAPCI ion sources	UP-ASAP-S02
iASAP ion source upgrade for existing APCI ion source	UP-ISAP-S02
ASAP <sup>®</sup> / iASAP ion source upgrade for existing APCI and vAPCI ion sources	UP-IASAP-S02
Upgrade of existing iASAP ion source to also include standard ASAP <sup>®</sup>	UP-ISAP-ASAP
Upgrade of existing standard ASAP <sup>®</sup> ion source to also include iASAP	UP-ASAP-ISAP
<b>Plate Express<sup>™</sup></b>	
Plate Express <sup>™</sup> CMS interface for analyzing TLC plates for 250 µm bed depths - (requires ACC374 and ACC361)	PE-001
Isocratic pump, for direct injection, Plate Express <sup>™</sup>	ACC361
Bracket for isocratic pump ACC361 if mounted underneath Plate Express <sup>™</sup>	ACC364
TLC interface accessory kit containing the required tubing, fittings, and cables	ACC374
Replacement filter for Plate Express <sup>™</sup> waste	ACC456
Replacement head for Plate Express <sup>™</sup> for 250 µm bed depth	ACC470
<b>Nitrogen generator</b>	
Nitrogen generator with compressor 12 L/min - 5 bar	AYUH00
<b>Accessories</b>	
Capillary Removal Tool	1012135
Replacement API Heated Capillary	ACC301
Replacement ESI capillary kit	ACC303
Replacement APCI capillary kit	ACC309
Replacement capillary kit for OPSI electrospray source	ACC314
Corona discharge pin for APCI and ASAP ion sources	1009975
Glass capillaries for ASAP/iASAP S02, pk 100	CAP-ASAP
<b>Standard mix</b>	
ESI Calibration/tune standard mix	IN1420
APCI Calibration/tune standard mix	S19010
Calibration vial replacement	1009926

## TriVersa NanoMate® LESA® with ESI chip® technology

**TriVersa NanoMate® LESA®****ESi Chip® Technology**

The TriVersa NanoMate® LESA® is the latest in chip-based electrospray ionization technology from Advion Interchim Scientific®. It combines the benefits of liquid chromatography, mass spectrometry, chip-based infusion, fraction collection and direct surface analysis into one integrated ion source platform. It allows scientists to obtain more information from complex samples than LC/MS alone.

**ESI Chip®**

The ESI Chip® unleashes the power of mass spectrometry through miniaturization. This microfluidic chip contains 400 nano-electrospray nozzles, etched in a silicon wafer. The fabrication method is highly reproducible to ensure the integrity and equal performance of each nozzle. The electrical field created by the nano-electrospray nozzle results in a highly efficient ionization and long lasting, stable sprays from  $\mu\text{L}$  of sample volume.



- Chips are available in three different nozzle emitter sizes from 2.5  $\mu\text{m}$  ID to 5.5  $\mu\text{m}$  ID
- Internal chip void volume in the  $\mu\text{L}$  range allows for 15 min spray time from only 3  $\mu\text{L}$  sample
- Automated sample handling can deliver spray solvent from samples in 96, 384 or 1536 sample well plates
- Silicon chip design delivers superior electric field strength and ionization efficiency
- Internal counter-electrode allows spray sensing and recovery feature

**Chip-based direct Infusion**

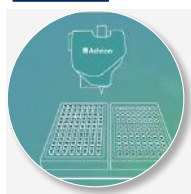
The TriVersa NanoMate® is the only automated ion source platform that allows high throughput infusion experiments for small or large analytes in applications ranging from shotgun lipidomics, to non-covalent interaction studies (NCI), to protein characterization.

**Benefits**

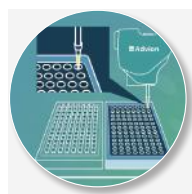
- Zero sample-to-sample carryover due to one tip, one sample, one nozzle workflow
- Stable nESI with long spray times from  $\mu\text{L}$  volume of samples
- High ionization efficiency, automated nano-electrospray
- High sample throughput from 96, 384 or 1536 well plates

**TYPICAL APPLICATIONS**

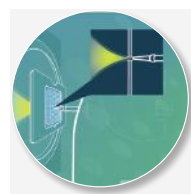
- Lipidomics, Metabolomics
- Top-down Protein Identification and Characterization
- QA/QC of Antibodies
- Non-covalent Interaction studies (NCI)
- Glycan Analysis

**3 STEP INFUSION EXPERIMENT****STEP 1**

Tip rack and Sample well plate is placed in robot.

**STEP 2**

Sample pick up from 96, 384 or 1536 well plate with dedicated Tip.

**STEP 3**

Tip with sample makes contact with ESI chip and Infusion experiment is initiated.



## TYPICAL APPLICATIONS

- Metabolite Identification
- Protein Biomarker Discovery
- QA/QC of Antibodies
- Top-down/bottom-up Proteomics
- Protein PTM analysis

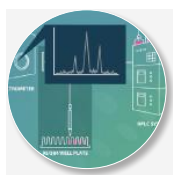
## LC/MS with Fraction Collection for re-analysis by Infusion

The TriVersa NanoMate® was developed to operate as a nano-ESI ion source for LC/MS applications. Excess LC eluate can be utilized for additional fraction collection to create a physical storage of the LC/MS experiment and allows re-analysis of fractions of interest as identified by the online LC/MS run.

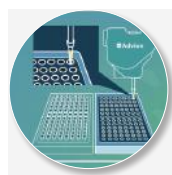
## Benefits

- More time across an LC/MS peak for more information from complex samples
- Integration with RAD detectors, external fraction collectors and UV detectors for increased workflow flexibility
- Qualitative and quantitative information with a single LC/MS run

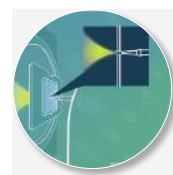
## 3 STEP LC/MS EXPERIMENT WITH FRACTION COLLECTION



**STEP 1**  
TV connects with HPLC and MS to act as nano-ESI ion source and fraction collector.



**STEP 2**  
Fractions are simultaneously collected during the LC/MS analysis.



**STEP 3**  
Fractions of interest are re-analyzed by Infusion.

## Liquid Extraction Surface Analysis (LESA®)

Liquid Extraction Surface Analysis (LESA®) was developed in collaboration with Dr. Gary van Berkel from the Oak Ridge National Laboratories. Its unique surface extraction via a liquid droplet held in suspension (liquid junction) allows a novel approach for spatially resolved analysis of biological and technical surfaces of interest. The pipetting accuracy of the TriVersa NanoMate® enables high sensitivity experiments with a spatial resolution of 1 mm on target.

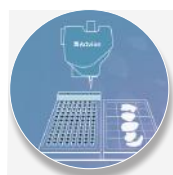
## TYPICAL APPLICATIONS

- PK/PD analysis of small molecule drugs
- Spatially resolved Lipidomics
- Biofilm analysis from medical devices
- Direct protein analysis
- Bacteria and fungi from culture

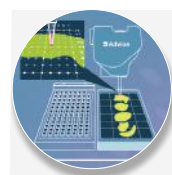
## Benefits

- Fast, simple and direct analysis
- 1 mm spatial resolution
- Liquid extraction and nESI based analysis
- High sensitivity due to nESI ionization and analyte extraction into only 1  $\mu$ L of solvent

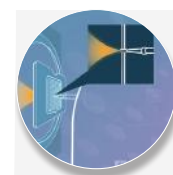
## 3 STEP LESA® EXPERIMENT



**STEP 1**  
Solvent reservoir is filled, Tips loaded and Surface mounted on Adapter plate.



**STEP 2**  
Robot aspirates extraction solvent into tip and starts extraction process at selected surface location.



**STEP 3**  
Extracted Analytes are ionized by Infusion nano electrospray analysis.

## TriVersa NanoMate® LESA® with ESI chip® technology

**Liquid Extraction Surface analysis coupled with LC (LESAplus LC)**

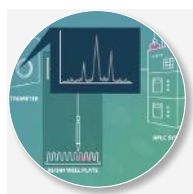
LESAplus LC experiments can be executed through the Developers Kit software extension and allows for the added benefit of separation. Spatial resolution can be improved to 400 µm on target and once the extract is placed in the loop of the on-board 6 port valve, an nLC/MS experiment can commence.

**Benefits**

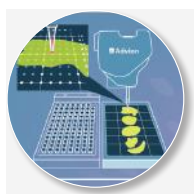
- Direct analysis from surface of interest
- 400 µm spatial resolution
- Liquid extraction and ESI based analysis
- High sensitivity due to added chromatographic separation
- Derivatization prior to LESAplus experiment
- Analysis of complex mixtures and isobaric compounds

**TYPICAL APPLICATIONS**

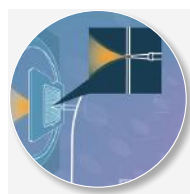
- Spatially resolved Lipidomics
- PK/PD analysis of small molecule drugs
- Peptidomics

**3 STEP LESAPLUS LC EXPERIMENT****STEP 1**

TV is reconfigured for LESAplus and makes connection with LC system and MS.

**STEP 2**

Robot dispenses extraction solvent via a fused silica capillary and starts extraction process at selected surface location.

**STEP 3**

Extract is aspirated into a loop of the on-board 6 port valve and injected into the nLC/MS.

**ChipSoft® Operating Software and Developers Kit Option**

The TriVersa NanoMate® LESA® is operated by a proprietary software program called ChipSoft®. It is used to set all parameters of system operation including sample volume, spray voltage, pressure and polarity as well as temperature, spray times and extraction parameters for LESA®. ChipSoft® is compatible with all PC architectures and versions of Windows.

Description	P/N
TriVersa NanoMate®.	TV-NMT
LESA® enabled TriVersa NanoMate®.	TV-NMTLESA
LESA® enabled TriVersa NanoMate® with additional on-board Camera system and Developers Kit interface to run LESAplus experiments (LESA-LC).	TV-NMTLESA-Plus
<b>Waters</b>	
Waters Mounting kit 13 - All Xevo and G2 source instruments, triple quad, TOF, QTOF and Synapt.	BRK114
DualSpray system - providing a TriVersa compatible nanoLockSpray ability for Waters Xevo and Synapt 2 HD and HDMS Mass Spectrometers.	ACC122
<b>Thermo</b>	
Thermo Electron Mounting kit 3 (LTQ, LTQ-XL, LTQ FT, LTQ OrbiTrap, LXQ, LCQ Fleet, Velos, Velos and OrbiTrap).	BRK203
Thermo Electron Mounting kit 9 for Exactive and QExactive. (includes height adjustable cart (1010583) with a table top range of 26 to 36" (66 to 91 cm).	BRK211
Thermo Electron Mounting Kit 10 for Thermo Fusion, Lumos, TSQ Quantiva, TSQ Endura, Orbitrap ID-X, Altis and Exploris 480. (includes height adjustable cart (1010583) with a table top range of 26 to 36" (66 to 91 cm).	BRK212
<b>A-Chips</b>	
5 micron nominal internal diameter nozzle chip. Typical intended flow rate range 100-500 nL/min. Recommended for the majority of TriVersa applications. Includes 1 rack of 384 spray pipette tips.	HD_A_384
5 micron nominal internal diameter nozzle chip. Typical intended flow rate range 100-500 nL/min. Recommended for the majority of TriVersa applications. Includes 4 racks of 96 spray pipette tips.	HD_A_96
<b>D-Chips</b>	
4 micron nominal internal diameter nozzle chip. Typical intended flow rate range 60-250 nL/min for longer spray times. Includes 1 rack of 384 spray pipette tips.	HD_D_384
4 micron nominal internal diameter nozzle chip. Typical intended flow rate range 60-250 nL/min for longer spray times. Includes 4 racks of 96 spray pipette tips.	HD_D_96
<b>G-Chips</b>	
2.5 micron nominal internal diameter nozzle chip. Typical intended flow rate range 20-60 nL/min. Includes 1 rack of 384 spray pipette tips.	HD_G_384
2.5 micron nominal internal diameter nozzle chip. Typical intended flow rate range 20-60 nL/min. Includes 4 racks of 96 spray pipette tips.	HD_G_96



## Nitrogen Generator

The N2 generator is designed to fit seamlessly in to your lab. This gas generator produces nitrogen using hollow fiber membranes that separate nitrogen from other components of compressed air.

Mainly used to supply mass spectrometers and evaporation systems, this generator can be used in all applications requiring purity levels between 90 and 99.5%. Its 30L/min and maximum pressure of 10bar offer multiple possibilities.

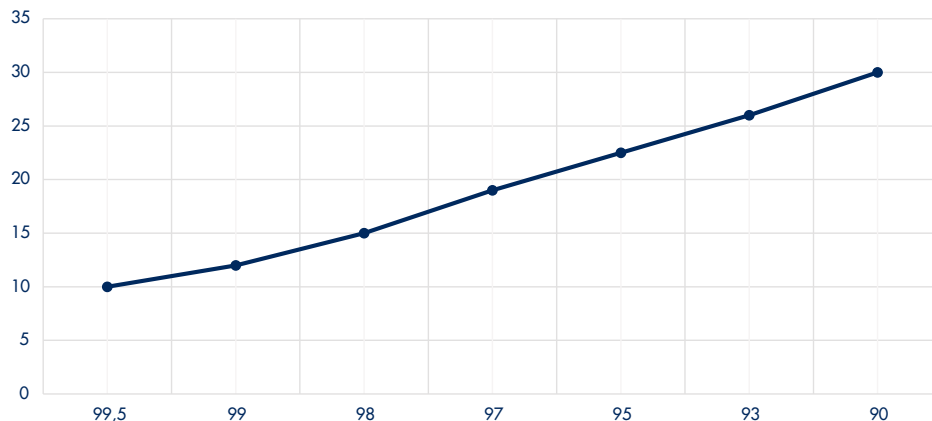
Thanks to its integrated air compressor, only a power supply is required for operation.

### Technical Specifications

- Plug and play system
  - Touch screen controller
  - Air compressor integrated
  - Membrane separation technology
- 
- Flow rate : up to 30L/min
  - Purity : up to 99.5%
  - Pressure range : up to 10 bar
  - Noise (emission) : <65dBA
- 
- Dimensions (WxDxH) : 440x855x760mm
  - Weight : 85kg



Flow N2 (Nlt/min) vs Purity - N2 Generator



P/N	Description
C2PKV0	Nitrogen Generator up to 30L/min
C2PKW0	Service Kit N2 Generator - 4000H or 12 000H
C2PKX0	Service Kit N2 Generator - 8000H
C2PKY0	Service Kit N2 Generator - 16 000H

Noise enclosure available on request



C1

Flash

# R08L159

34 mL/min

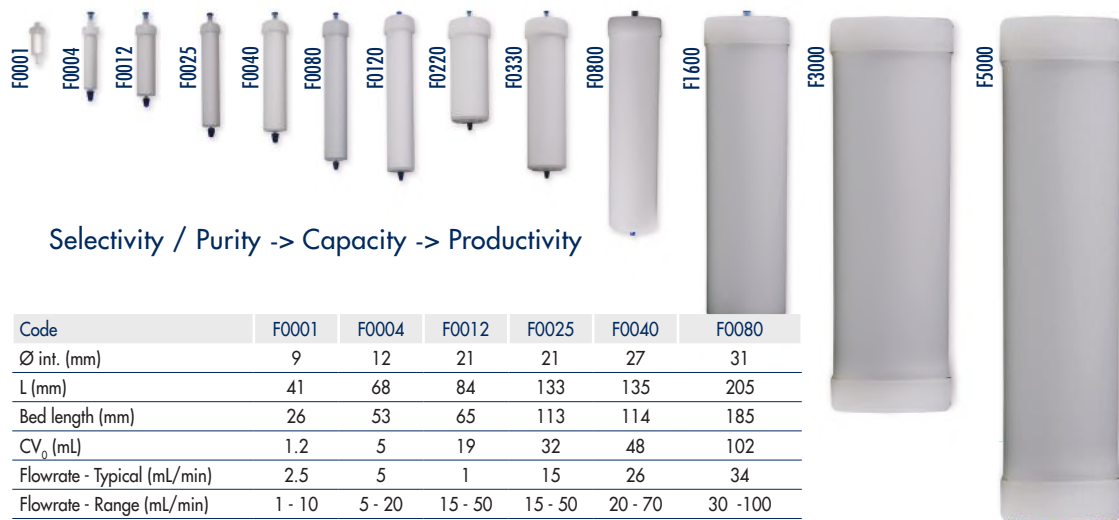
max. 20 bar

### Flash columns

We offer more than 35 selections for the purification of small & bio-molecules.

Our Ultra Pure Spherical Silica combined with our chemistry establishes optimized sample recovery and makes easier transfer from analytical to purification.

Advion Interchim Scientific® "Genius" allows an easy transfer from any TLC or analytical data from any columns to "ready-to-go" and safe Gradient Purification Method RFID Traceability.



Selectivity / Purity -> Capacity -> Productivity

Code	F0001	F0004	F0012	F0025	F0040	F0080
Ø int. (mm)	9	12	21	21	27	31
L (mm)	41	68	84	133	135	205
Bed length (mm)	26	53	65	113	114	185
CV <sub>0</sub> (mL)	1.2	5	19	32	48	102
Flowrate - Typical (mL/min)	2.5	5	1	15	26	34
Flowrate - Range (mL/min)	1 - 10	5 - 20	15 - 50	15 - 50	20 - 70	30 - 100
Max Pressure (bar)	7	22	22	22	20	20

Code	F0120	F0220	F0330	F0800	F1600	F3000	F5000
Ø int. (mm)	36	60	60	78	104	127.5	127.5
L (mm)	224	153	226	341	385	514	770
Bed length (mm)	202	127	200	314	353	400	660
CV <sub>0</sub> (mL)	153	269	405	1 078	2 170	4100	6700
Flowrate - Typical (mL/min)	46	127	127	216	383	550	550
Flowrate - Range (mL/min)	40 - 150	80 - 300	80 - 300	150 - 300	200 - 500	320-680	320-680
Max Pressure (bar)	20	20	20	7	7	7	7

### LC Preparative columns

Preparative columns range from 10.0 to 50.8mm i.d. and are for the purification of samples ranging from 0.5mg to 1 gram.

#### Column tubing & column packing

The tube polishing value (Ra) has a fundamental importance in preparative chromatography.

A primary reason for broad peaks and low efficiency is the utilization of poor quality tubing. Molecules in the center of the mobile phase stream can move more rapidly than molecules closer to the side due to friction against the tubing surface. The lower the Ra value, the smoother the surface is, and the less "drag" the tubing will place upon a given separation. All columns have extremely smooth internal surfaces (typically 8µ inch of Ra) to considerably reduce issues of drag and maintain column efficiency.

#### Sample dispersion

The loading of sample onto a preparative column requires stringent management to establish quality separations. Column overloading results in a poor retention of pure fraction and therefore particular attention needs to be placed upon selecting the appropriate column dimension and the properties of the stationary phase. In addition, careful sample introduction control to the column is necessary to establish a homogeneous sample dispersion through the sorbent bead head. Sample typically enters a preparative column through a 1/16" fitting; poor sample loading will lead to overloading certain areas of the stationary phase whilst other areas will be underloaded. In addition to a dramatic loss in capacity there will also be a high potential for the column head to prematurely clog, rapidly reducing column life. To prevent this problem, Advion Interchim Scientific's Modulo-cart Preparative columns are outfitted with a sample distributor.



## puriFlash® IR-SI

Flash columns	20 µm	Qty	50 µm	Qty
F0004	IR-20SI-F0004	40 u	IR-50SI-F0004	40 u
F0012	IR-20SI-F0012	30 u	IR-50SI-F0012	30 u
F0025	IR-20SI-F0025	25 u	IR-50SI-F0025	25 u
F0040	IR-20SI-F0040	20 u	IR-50SI-F0040	20 u
F0080	IR-20SI-F0080	10 u	IR-50SI-F0080	10 u
F0120	IR-20SI-F0120	8 u	IR-50SI-F0120	8 u
F0220	IR-20SI-F0220	4 u	IR-50SI-F0220	4 u
F0330	IR-20SI-F0330	4 u	IR-50SI-F0330	4 u
F0800	IR-20SI-F0800	1 u	IR-50SI-F0800	1 u
F1600	IR-20SI-F1600	1 u	IR-50SI-F1600	1 u

## puriFlash® IR-SI - Jumbo pack

Flash columns	20 µm	Qty	50 µm	Qty
F0004	IR-20SI-JP-F0004	160 u	IR-50SI-JP-F0004	400 u
F0012	IR-20SI-JP-F0012	120 u	IR-50SI-JP-F0012	300 u
F0025	IR-20SI-JP-F0025	100 u	IR-50SI-JP-F0025	250 u
F0040	IR-20SI-JP-F0040	80 u	IR-50SI-JP-F0040	200 u
F0080	IR-20SI-JP-F0080	40 u	IR-50SI-JP-F0080	100 u
F0120	IR-20SI-JP-F0120	32 u	IR-50SI-JP-F0120	80 u
F0220	IR-20SI-JP-F0220	16 u	IR-50SI-JP-F0220	40 u
F0330	IR-20SI-JP-F0330	16 u	IR-50SI-JP-F0330	40 u
F0800	---	---	IR-50SI-JP-F0800	10 u
F1600	---	---	IR-50SI-JP-F1600	10 u

## puriFlash® SI-HP

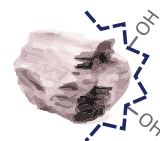
LC Preparative Columns	5 µm	Qty	10 µm	Qty	15 µm	Qty
250 x 4.6 mm	PF5SIHP-250/P46	1 u	PF10SIHP-250/P46	1 u	PF15SIHP-250/P46	1 u
150 x 10.0 mm	PF5SIHP-150/100	1 u	PF10SIHP-150/100	1 u	PF15SIHP-150/100	1 u
250 x 10.0 mm	PF5SIHP-250/100	1 u	PF10SIHP-250/100	1 u	PF15SIHP-250/100	1 u
50 x 21.2 mm	PF5SIHP-050/212	1 u	PF10SIHP-050/212	1 u	PF15SIHP-050/212	1 u
100 x 21.2 mm	PF5SIHP-100/212	1 u	PF10SIHP-100/212	1 u	PF15SIHP-100/212	1 u
150 x 21.2 mm	PF5SIHP-150/212	1 u	PF10SIHP-150/212	1 u	PF15SIHP-150/212	1 u
250 x 21.2 mm	PF5SIHP-250/212	1 u	PF10SIHP-250/212	1 u	PF15SIHP-250/212	1 u
50 x 30.0 mm	PF5SIHP-050/300	1 u	PF10SIHP-050/300	1 u	PF15SIHP-050/300	1 u
100 x 30.0 mm	PF5SIHP-100/300	1 u	PF10SIHP-100/300	1 u	PF15SIHP-100/300	1 u
150 x 30.0 mm	PF5SIHP-150/300	1 u	PF10SIHP-150/300	1 u	PF15SIHP-150/300	1 u
250 x 30.0 mm	PF5SIHP-250/300	1 u	PF10SIHP-250/300	1 u	PF15SIHP-250/300	1 u
50 x 50.0 mm	PF5SIHP-050/500	1 u	PF10SIHP-050/500	1 u	PF15SIHP-050/500	1 u
250 x 50.0 mm	PF5SIHP-250/500	1 u	PF10SIHP-250/500	1 u	PF15SIHP-250/500	1 u

Notes: influence of water content of silica.

The water contents are different between the silica gels used to make the TLC plates and the same materials used to make the spherical silica gels for purification

Flash: Silica gel for TLC = 6 - 6.5%

Spherical silica gel for Flash <= 2.0%



## puriFlash® IR-SI

60 Å - 450 m<sup>2</sup>/g

20 & 40/63 µm

pH stability: 1.5 to 6.5

Economical

## APPLICATION AREA

HPLC	○
PrepLC	○
Flash	●

Single use columns

General application:

Non-ionic & polar organic molecules



## puriFlash® SI-HP

60 Å - 500 m<sup>2</sup>/g

5, 10, 15, 30 & 50 µm

pH stability: 1.5 to 6.5

High efficiency

## APPLICATION AREA

HPLC	●
PrepLC	●
Flash	●

Single use columns

General application:

Non-ionic & polar organic molecules





## puriFlash® SI-HP

60 Å - 500 m<sup>2</sup>/g  
5, 10, 15, 30 & 50 µm  
pH stability: 1.5 to 6.5  
High efficiency

## APPLICATION AREA

HPLC ●  
Prep-LC ●  
Flash ●

Single use columns

General application:

Non-ionic & polar organic molecules



## puriFlash® SI-HC

60 Å - 680 m<sup>2</sup>/g  
15, 25 & 50 µm  
pH stability: 1.5 to 6.5  
Greater loading capacity  
& productivity  
Low back pressure

## APPLICATION AREA

HPLC ○  
Prep-LC ○  
Flash ●

Single use columns

General application:

Non-ionic & polar organic molecules

## puriFlash® SIHP

Flash Columns	15µm	Qty	30µm	Qty	50µm	Qty
F0001	SC-15SIHP-F0001	50u	---	---	---	---
F0004	PF-15SIHP-F0004	20u	PF-30SIHP-F0004	40u	PF-50SIHP-F0004	40u
F0012	PF-15SIHP-F0012	20u	PF-30SIHP-F0012	30u	PF-50SIHP-F0012	30u
F0025	PF-15SIHP-F0025	12u	PF-30SIHP-F0025	25u	PF-50SIHP-F0025	25u
F0040	PF-15SIHP-F0040	12u	PF-30SIHP-F0040	20u	PF-50SIHP-F0040	20u
F0080	PF-15SIHP-F0080	4u	PF-30SIHP-F0080	10u	PF-50SIHP-F0080	10u
F0120	PF-15SIHP-F0120	4u	PF-30SIHP-F0120	8u	PF-50SIHP-F0120	8u
F0220	PF-15SIHP-F0220	2u	PF-30SIHP-F0220	4u	PF-50SIHP-F0220	4u
F0330	PF-15SIHP-F0330	2u	PF-30SIHP-F0330	4u	PF-50SIHP-F0330	4u
F0800	---	---	PF-30SIHP-F0800	1u	PF-50SIHP-F0800	1u
F1600	---	---	PF-30SIHP-F1600	1u	PF-50SIHP-F1600	1u
F3000	---	---	30SIHP-F3000	1u	50SIHP-F3000	1u

## puriFlash® SIHP - Jumbo pack

Flash Columns	15µm	Qty	30µm	Qty	50µm	Qty
F0004	PF-15SIHP-JP-F0004	80u	PF-30SIHP-JP-F0004	160u	PF-50SIHP-JP-F0004	160u
F0012	PF-15SIHP-JP-F0012	80u	PF-30SIHP-JP-F0012	120u	PF-50SIHP-JP-F0012	120u
F0025	PF-15SIHP-JP-F0025	48u	PF-30SIHP-JP-F0025	100u	PF-50SIHP-JP-F0025	100u
F0040	PF-15SIHP-JP-F0040	48u	PF-30SIHP-JP-F0040	80u	PF-50SIHP-JP-F0040	80u
F0080	PF-15SIHP-JP-F0080	32u	PF-30SIHP-JP-F0080	40u	PF-50SIHP-JP-F0080	40u
F0120	PF-15SIHP-JP-F0120	16u	PF-30SIHP-JP-F0120	32u	PF-50SIHP-JP-F0120	32u
F0220	PF-15SIHP-JP-F0220	8u	PF-30SIHP-JP-F0220	16u	PF-50SIHP-JP-F0220	16u
F0330	PF-15SIHP-JP-F0330	8u	PF-30SIHP-JP-F0330	16u	PF-50SIHP-JP-F0330	16u
F0800	---	---	PF-30SIHP-JP-F0800	4u	PF-50SIHP-JP-F0800	4u
F1600	---	---	PF-30SIHP-JP-F1600	4u	PF-50SIHP-JP-F1600	4u

## puriFlash® SIHC

Flash Columns	15µm	Qty	25µm	Qty	50µm	Qty
F0001	SC-15SIHC-F0001	50u	---	---	---	---
F0004	PF-15SIHC-F0004	20u	PF-25SIHC-F0004	40u	PF-50SIHC-F0004	40u
F0012	PF-15SIHC-F0012	20u	PF-25SIHC-F0012	30u	PF-50SIHC-F0012	30u
F0025	PF-15SIHC-F0025	12u	PF-25SIHC-F0025	25u	PF-50SIHC-F0025	25u
F0040	PF-15SIHC-F0040	12u	PF-25SIHC-F0040	20u	PF-50SIHC-F0040	20u
F0080	PF-15SIHC-F0080	4u	PF-25SIHC-F0080	10u	PF-50SIHC-F0080	10u
F0120	PF-15SIHC-F0120	4u	PF-25SIHC-F0120	8u	PF-50SIHC-F0120	8u
F0220	PF-15SIHC-F0220	2u	PF-25SIHC-F0220	4u	PF-50SIHC-F0220	4u
F0330	PF-15SIHC-F0330	2u	PF-25SIHC-F0330	4u	PF-50SIHC-F0330	4u
F0800	---	---	PF-25SIHC-F0800	1u	PF-50SIHC-F0800	1u
F1600	---	---	PF-25SIHC-F1600	1u	PF-50SIHC-F1600	1u
F3000	---	---	25SIHC-F3000	1u	50SIHC-F3000	1u

## puriFlash® SIHC - Jumbo pack

Flash Columns	15µm	Qty	25µm	Qty	50µm	Qty
F0004	PF-15SIHC-JP-F0004	80u	PF-25SIHC-JP-F0004	160u	PF-50SIHC-JP-F0004	160u
F0012	PF-15SIHC-JP-F0012	80u	PF-25SIHC-JP-F0012	120u	PF-50SIHC-JP-F0012	120u
F0025	PF-15SIHC-JP-F0025	48u	PF-25SIHC-JP-F0025	100u	PF-50SIHC-JP-F0025	100u
F0040	PF-15SIHC-JP-F0040	48u	PF-25SIHC-JP-F0040	80u	PF-50SIHC-JP-F0040	80u
F0080	PF-15SIHC-JP-F0080	16u	PF-25SIHC-JP-F0080	40u	PF-50SIHC-JP-F0080	40u
F0120	PF-15SIHC-JP-F0120	16u	PF-25SIHC-JP-F0120	32u	PF-50SIHC-JP-F0120	32u
F0220	PF-15SIHC-JP-F0220	8u	PF-25SIHC-JP-F0220	16u	PF-50SIHC-JP-F0220	16u
F0330	PF-15SIHC-JP-F0330	8u	PF-25SIHC-JP-F0330	16u	PF-50SIHC-JP-F0330	16u
F0800	---	---	PF-25SIHC-JP-F0800	4u	PF-50SIHC-JP-F0800	4u
F1600	---	---	PF-25SIHC-JP-F1600	4u	PF-50SIHC-JP-F1600	4u

## puriFlash® columns - Normal Phase / Ion Exchange

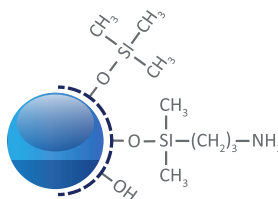
## puriFlash® NH2

LC Preparative Columns	5µm	Qty	10µm	Qty	15µm	Qty
250 x 4.6mm	PF5NH2-250/P46	1u	PF10NH2-250/P46	1u	PF15NH2-250/P46	1u
150 x 10.0mm	PF5NH2-150/100	1u	PF10NH2-150/100	1u	PF15NH2-150/100	1u
250 x 10.0mm	PF5NH2-250/100	1u	PF10NH2-250/100	1u	PF15NH2-250/100	1u
50 x 21.2mm	PF5NH2-050/212	1u	PF10NH2-050/212	1u	PF15NH2-050/212	1u
100 x 21.2mm	PF5NH2-100/212	1u	PF10NH2-100/212	1u	PF15NH2-100/212	1u
150 x 21.2mm	PF5NH2-150/212	1u	PF10NH2-150/212	1u	PF15NH2-150/212	1u
250 x 21.2mm	PF5NH2-250/212	1u	PF10NH2-250/212	1u	PF15NH2-250/212	1u
50 x 30.0mm	PF5NH2-050/300	1u	PF10NH2-050/300	1u	PF15NH2-050/300	1u
100 x 30.0mm	PF5NH2-100/300	1u	PF10NH2-100/300	1u	PF15NH2-100/300	1u
150 x 30.0mm	PF5NH2-150/300	1u	PF10NH2-150/300	1u	PF15NH2-150/300	1u
250 x 30.0mm	PF5NH2-250/300	1u	PF10NH2-250/300	1u	PF15NH2-250/300	1u
50 x 50.0mm	PF5NH2-050/500	1u	PF10NH2-050/500	1u	PF15NH2-050/500	1u
250 x 50.0mm	PF5NH2-250/500	1u	PF10NH2-250/500	1u	PF15NH2-250/500	1u

Flash Columns	15µm	Qty	30µm	Qty	50µm	Qty
F0004	PF-15NH2-F0004	4u	PF-30NH2-F0004	4u	PF-50NH2-F0004	4u
F0012	PF-15NH2-F0012	2u	PF-30NH2-F0012	2u	PF-50NH2-F0012	2u
F0025	PF-15NH2-F0025	1u	PF-30NH2-F0025	1u	PF-50NH2-F0025	1u
F0040	PF-15NH2-F0040	1u	PF-30NH2-F0040	1u	PF-50NH2-F0040	1u
F0080	PF-15NH2-F0080	1u	PF-30NH2-F0080	1u	PF-50NH2-F0080	1u
F0120	PF-15NH2-F0120	1u	PF-30NH2-F0120	1u	PF-50NH2-F0120	1u
F0220	PF-15NH2-F0220	1u	PF-30NH2-F0220	1u	PF-50NH2-F0220	1u
F0330	PF-15NH2-F0330	1u	PF-30NH2-F0330	1u	PF-50NH2-F0330	1u
F0800	---	---	PF-30NH2-F0800	1u	PF-50NH2-F0800	1u
F1600	---	---	PF-30NH2-F1600	1u	PF-50NH2-F1600	1u

## puriFlash® NH2HC

Flash Columns	50µm	Qty
F0004	PF-50NH2HC-F0004	4u
F0012	PF-50NH2HC-F0012	2u
F0025	PF-50NH2HC-F0025	1u
F0040	PF-50NH2HC-F0040	1u
F0080	PF-50NH2HC-F0080	1u
F0120	PF-50NH2HC-F0120	1u
F0220	PF-50NH2HC-F0220	1u
F0330	PF-50NH2HC-F0330	1u
F0800	PF-50NH2HC-F0800	1u
F1600	PF-50NH2HC-F1600	1u



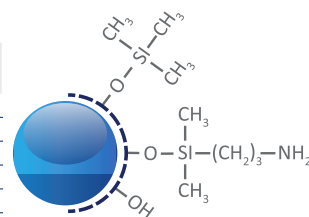
## puriFlash® NH2-HC

60 Å - 680 m<sup>2</sup>/g  
50 µm  
Amino  
%C: 4

End-capping: n.c  
pH stability: 1.5 to 6.5  
Can be both a weak anion exchanger for strong acids or a polar phase that can interact with the OH, NH, SH ... functions.

## APPLICATION AREA

HPLC ○  
PrepLC ○  
Flash ●



## puriFlash® NH2

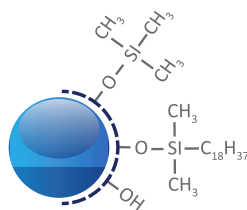
100 Å - 300 m<sup>2</sup>/g  
5, 10, 15, 30 & 50 µm  
Amino  
%C: 4

End-capping: One-step  
pH stability: 2 to 6.5  
Can be both a weak anion exchanger for strong acids or a polar phase that can interact with the OH, NH, SH ... functions.

## APPLICATION AREA

HPLC ●  
PrepLC ●  
Flash ●





### puriFlash® C18-HP

100 Å - 300 m<sup>2</sup>/g  
5, 10, 15, 30 & 50 µm  
C18 Mono-functional  
%C: 16.5

End-capping: One-step  
pH stability: 1.5 to 7.5

Suitable for multiple pharmaceutical applications. This is an excellent choice for routine reverse phase purifications.

#### APPLICATION AREA

HPLC ●  
PrepLC ●  
Flash ●

Reusable column

General application:

Medium and high apolar organic compounds

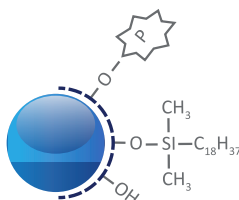
### puriFlash® C18-HP

LC Preparative Columns	5µm	Qty	10µm	Qty	15µm	Qty
250 x 4.6mm	PF5C18HP-250/P46	1u	PF10C18HP-250/P46	1u	PF15C18HP-250/P46	1u
150 x 10.0mm	PF5C18HP-150/100	1u	PF10C18HP-150/100	1u	PF15C18HP-150/100	1u
250 x 10.0mm	PF5C18HP-250/100	1u	PF10C18HP-250/100	1u	PF15C18HP-250/100	1u
50 x 21.2mm	PF5C18HP-050/212	1u	PF10C18HP-050/212	1u	PF15C18HP-050/212	1u
100 x 21.2mm	PF5C18HP-100/212	1u	PF10C18HP-100/212	1u	PF15C18HP-100/212	1u
150 x 21.2mm	PF5C18HP-150/212	1u	PF10C18HP-150/212	1u	PF15C18HP-150/212	1u
250 x 21.2mm	PF5C18HP-250/212	1u	PF10C18HP-250/212	1u	PF15C18HP-250/212	1u
50 x 30.0mm	PF5C18HP-050/300	1u	PF10C18HP-050/300	1u	PF15C18HP-050/300	1u
100 x 30.0mm	PF5C18HP-100/300	1u	PF10C18HP-100/300	1u	PF15C18HP-100/300	1u
150 x 30.0mm	PF5C18HP-150/300	1u	PF10C18HP-150/300	1u	PF15C18HP-150/300	1u
250 x 30.0mm	PF5C18HP-250/300	1u	PF10C18HP-250/300	1u	PF15C18HP-250/300	1u
50 x 50.0mm	PF5C18HP-050/500	1u	PF10C18HP-050/500	1u	PF15C18HP-050/500	1u
250 x 50.0mm	PF5C18HP-250/500	1u	PF10C18HP-250/500	1u	PF15C18HP-250/500	1u

### puriFlash® C18-HP

Flash Columns	15µm	Qty	30µm	Qty	50µm	Qty
F0001	SC-15C18HP-F0001	25u	---	---	---	---
F0004	PF-15C18HP-F0004	4u	PF-30C18HP-F0004	25u	PF-50C18HP-F0004	25u
F0012	PF-15C18HP-F0012	2u	PF-30C18HP-F0012	4u	PF-50C18HP-F0012	4u
F0025	PF-15C18HP-F0025	1u	PF-30C18HP-F0025	2u	PF-50C18HP-F0025	2u
F0040	PF-15C18HP-F0040	1u	PF-30C18HP-F0040	1u	PF-50C18HP-F0040	1u
F0080	PF-15C18HP-F0080	1u	PF-30C18HP-F0080	1u	PF-50C18HP-F0080	1u
F0120	PF-15C18HP-F0120	1u	PF-30C18HP-F0120	1u	PF-50C18HP-F0120	1u
F0220	PF-15C18HP-F0220	1u	PF-30C18HP-F0220	1u	PF-50C18HP-F0220	1u
F0330	PF-15C18HP-F0330	1u	PF-30C18HP-F0330	1u	PF-50C18HP-F0330	1u
F0800	---	---	PF-30C18HP-F0800	1u	PF-50C18HP-F0800	1u
F1600	---	---	PF-30C18HP-F1600	1u	PF-50C18HP-F1600	1u

### puriFlash® C18-AQ



### puriFlash® C18-AQ

100 Å - 300 m<sup>2</sup>/g  
5, 10, 15 & 30 µm  
C18 Mono-functional  
%C: 14

End-capping: Mixte  
pH stability: 2.0 to 7.5

The bonding chemistry makes it possible to start the gradient at 100% water. Suitable for the separation and purification of moderately polar and non-polar molecules.

#### APPLICATION AREA

HPLC ●  
PrepLC ●  
Flash ●

Reusable column

General application:

Medium and high apolar organic compounds

LC Preparative Columns	5µm	Qty	10µm	Qty	15µm	Qty
250 x 4.6mm	PF5C18AQ-250/P46	1u	PF10C18AQ-250/P46	1u	PF15C18AQ-250/P46	1u
150 x 10.0mm	PF5C18AQ-150/100	1u	PF10C18AQ-150/100	1u	PF15C18AQ-150/100	1u
250 x 10.0mm	PF5C18AQ-250/100	1u	PF10C18AQ-250/100	1u	PF15C18AQ-250/100	1u
50 x 21.2mm	PF5C18AQ-050/212	1u	PF10C18AQ-050/212	1u	PF15C18AQ-050/212	1u
100 x 21.2mm	PF5C18AQ-100/212	1u	PF10C18AQ-100/212	1u	PF15C18AQ-100/212	1u
150 x 21.2mm	PF5C18AQ-150/212	1u	PF10C18AQ-150/212	1u	PF15C18AQ-150/212	1u
250 x 21.2mm	PF5C18AQ-250/212	1u	PF10C18AQ-250/212	1u	PF15C18AQ-250/212	1u
50 x 30.0mm	PF5C18AQ-050/300	1u	PF10C18AQ-050/300	1u	PF15C18AQ-050/300	1u
100 x 30.0mm	PF5C18AQ-100/300	1u	PF10C18AQ-100/300	1u	PF15C18AQ-100/300	1u
150 x 30.0mm	PF5C18AQ-150/300	1u	PF10C18AQ-150/300	1u	PF15C18AQ-150/300	1u
250 x 30.0mm	PF5C18AQ-250/300	1u	PF10C18AQ-250/300	1u	PF15C18AQ-250/300	1u
50 x 50.0mm	PF5C18AQ-050/500	1u	PF10C18AQ-050/500	1u	PF15C18AQ-050/500	1u
250 x 50.0mm	PF5C18AQ-250/500	1u	PF10C18AQ-250/500	1u	PF15C18AQ-250/500	1u

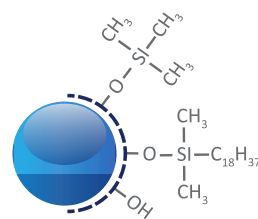
Flash Columns	15µm	Qty	30µm	Qty
F0001	SC-15C18AQ-F0001	25u	---	---
F0004	PF-15C18AQ-F0004	4u	PF-30C18AQ-F0004	4u
F0012	PF-15C18AQ-F0012	2u	PF-30C18AQ-F0012	2u
F0025	PF-15C18AQ-F0025	1u	PF-30C18AQ-F0025	1u
F0040	PF-15C18AQ-F0040	1u	PF-30C18AQ-F0040	1u
F0080	PF-15C18AQ-F0080	1u	PF-30C18AQ-F0080	1u
F0120	PF-15C18AQ-F0120	1u	PF-30C18AQ-F0120	1u
F0220	PF-15C18AQ-F0220	1u	PF-30C18AQ-F0220	1u
F0330	PF-15C18AQ-F0330	1u	PF-30C18AQ-F0330	1u
F0800	---	---	PF-30C18AQ-F0800	1u
F1600	---	---	PF-30C18AQ-F1600	1u

puriFlash® columns - Reverse Phase

puriFlash® C18-XS

LC Preparative Columns	5µm	Qty	10µm	Qty	15µm	Qty
250 x 4.6mm	PF5C18XS-250/P46	1u	PF10C18XS-250/P46	1u	PF15C18XS-250/P46	1u
150 x 10.0mm	PF5C18XS-150/100	1u	PF10C18XS-150/100	1u	PF15C18XS-150/100	1u
250 x 10.0mm	PF5C18XS-250/100	1u	PF10C18XS-250/100	1u	PF15C18XS-250/100	1u
50 x 21.2mm	PF5C18XS-050/212	1u	PF10C18XS-050/212	1u	PF15C18XS-050/212	1u
100 x 21.2mm	PF5C18XS-100/212	1u	PF10C18XS-100/212	1u	PF15C18XS-100/212	1u
150 x 21.2mm	PF5C18XS-150/212	1u	PF10C18XS-150/212	1u	PF15C18XS-150/212	1u
250 x 21.2mm	PF5C18XS-250/212	1u	PF10C18XS-250/212	1u	PF15C18XS-250/212	1u
50 x 30.0mm	PF5C18XS-050/300	1u	PF10C18XS-050/300	1u	PF15C18XS-050/300	1u
100 x 30.0mm	PF5C18XS-100/300	1u	PF10C18XS-100/300	1u	PF15C18XS-100/300	1u
150 x 30.0mm	PF5C18XS-150/300	1u	PF10C18XS-150/300	1u	PF15C18XS-150/300	1u
250 x 30.0mm	PF5C18XS-250/300	1u	PF10C18XS-250/300	1u	PF15C18XS-250/300	1u
50 x 50.0mm	PF5C18XS-050/500	1u	PF10C18XS-050/500	1u	PF15C18XS-050/500	1u
250 x 50.0mm	PF5C18XS-250/500	1u	PF10C18XS-250/500	1u	PF15C18XS-250/500	1u

Flash Columns	15µm	Qty	30µm	Qty
F0001	SC-15C18XS-F0001	25u	---	---
F0004	PF-15C18XS-F0004	4u	PF-30C18XS-F0004	4u
F0012	PF-15C18XS-F0012	2u	PF-30C18XS-F0012	2u
F0025	PF-15C18XS-F0025	1u	PF-30C18XS-F0025	1u
F0040	PF-15C18XS-F0040	1u	PF-30C18XS-F0040	1u
F0080	PF-15C18XS-F0080	1u	PF-30C18XS-F0080	1u
F0120	PF-15C18XS-F0120	1u	PF-30C18XS-F0120	1u
F0220	PF-15C18XS-F0220	1u	PF-30C18XS-F0220	1u
F0330	PF-15C18XS-F0330	1u	PF-30C18XS-F0330	1u
F0800	---	---	PF-30C18XS-F0800	1u
F1600	---	---	PF-30C18XS-F1600	1u



puriFlash® C18-XS

100 Å - 300 m<sup>2</sup>/g  
5, 10, 15 & 30 µm  
C18 Mono-functional  
%C: 17

End-capping: Multi-step  
pH stability: 1 to 10.0

The proprietary end-capping multi-step technology ensures stability under high pH conditions, up to 10.

It is an excellent phase for the complete separation of basic molecules.

APPLICATION AREA

- HPLC ●
- PrepLC ●
- Flash ●

Reusable column

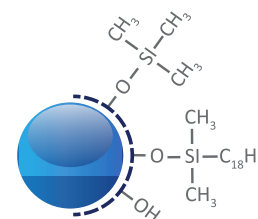
General application:

Medium and high apolar organic compounds

Uptisphere® Strategy™ C18-HQ

LC Preparative Columns	5µm	Qty	10µm	Qty	15µm	Qty
250 x 4.6mm	US5C18HQ-250/P46	1u	US10C18HQ-250/P46	1u	US15C18HQ-250/P46	1u
150 x 10.0mm	US5C18HQ-150/100	1u	US10C18HQ-150/100	1u	US15C18HQ-150/100	1u
250 x 10.0mm	US5C18HQ-250/100	1u	US10C18HQ-250/100	1u	US15C18HQ-250/100	1u
50 x 21.2mm	US5C18HQ-050/212	1u	US10C18HQ-050/212	1u	US15C18HQ-050/212	1u
100 x 21.2mm	US5C18HQ-100/212	1u	US10C18HQ-100/212	1u	US15C18HQ-100/212	1u
150 x 21.2mm	US5C18HQ-150/212	1u	US10C18HQ-150/212	1u	US15C18HQ-150/212	1u
250 x 21.2mm	US5C18HQ-250/212	1u	US10C18HQ-250/212	1u	US15C18HQ-250/212	1u
50 x 30.0mm	US5C18HQ-050/300	1u	US10C18HQ-050/300	1u	US15C18HQ-050/300	1u
100 x 30.0mm	US5C18HQ-100/300	1u	US10C18HQ-100/300	1u	US15C18HQ-100/300	1u
150 x 30.0mm	US5C18HQ-150/300	1u	US10C18HQ-150/300	1u	US15C18HQ-150/300	1u
250 x 30.0mm	US5C18HQ-250/300	1u	US10C18HQ-250/300	1u	US15C18HQ-250/300	1u
50 x 50.0mm	US5C18HQ-050/500	1u	US10C18HQ-050/500	1u	US15C18HQ-050/500	1u
250 x 50.0mm	US5C18HQ-250/500	1u	US10C18HQ-250/500	1u	US15C18HQ-250/500	1u

Flash Columns	15µm	Qty
F0001	SC-15C18HQ-F0001	25u
F0004	PF-15C18HQ-F0004	4u
F0012	PF-15C18HQ-F0012	2u
F0025	PF-15C18HQ-F0025	1u
F0040	PF-15C18HQ-F0040	1u
F0080	PF-15C18HQ-F0080	1u
F0120	PF-15C18HQ-F0120	1u
F0220	PF-15C18HQ-F0220	1u
F0330	PF-15C18HQ-F0330	1u



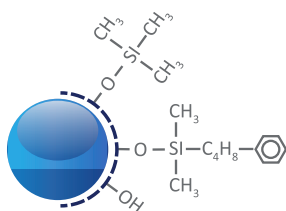
Uptisphere® Strategy™ C18-HQ

100 Å - 425 m<sup>2</sup>/g  
1.7, 2.2, 3, 5, 10, 15 µm  
C18 Mono-functional  
%C: 19

End-capping: Multi-step  
pH stability: 1.0 to 10.0

Suitable for many pharmaceutical applications and routine methods. Its specific surface area of 425m<sup>2</sup>/g gives it a high loading capacity.





### Uptisphere® Strategy™ PHC4

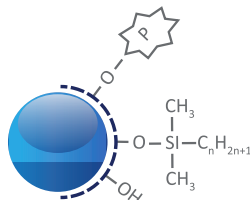
100 Å - 300 m<sup>2</sup>/g  
2.2, 3, 5, 10, 15 µm  
PH C4 Mono-functional  
%C: 12

End-capping: One-step  
pH stability: 1.5 to 7.5

Very selective for compounds having  
aromatic rings  
and moderately polar compounds.

#### APPLICATION AREA

HPIC ●  
Prep-LC ●  
Flash ●



### puriFlash® RP-AQ

60 Å - 500 m<sup>2</sup>/g  
15 & 30 µm  
RP-alkyl  
%C: 6

End-capping: Mixte  
pH stability: 2.0 to 7.5

The bonding chemistry makes  
it possible to start the gradient  
at 100% water. Suitable for the  
separation and purification of  
strongly and moderately polar  
molecules. Compared to a C18, the  
peaks are eluted earlier from the  
beginning of the gradient.

#### APPLICATION AREA

HPIC ○  
Prep-LC ○  
Flash ●

Reusable column

General application:

Medium and high apolar organic compounds

### Uptisphere® Strategy™ PHC4

Flash columns	15 µm	Qty
F0001	SC-15PHC4-F0001	25 u
F0004	PF-15PHC4-F0004	4 u
F0012	PF-15PHC4-F0012	2 u
F0025	PF-15PHC4-F0025	1 u
F0040	PF-15PHC4-F0040	1 u
F0080	PF-15PHC4-F0080	1 u
F0120	PF-15PHC4-F0120	1 u
F0220	PF-15PHC4-F0220	1 u
F0330	PF-15PHC4-F0330	1 u

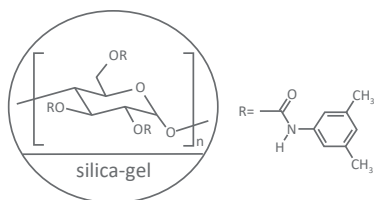
LC Preparative Columns	5 µm	Qty	10 µm	Qty	15 µm	Qty
250 x 4.6 mm	US5PHC4-250/P46	1 u	US10PHC4-250/P46	1 u	US15PHC4-250/P46	1 u
150 x 10.0 mm	US5PHC4-150/100	1 u	US10PHC4-150/100	1 u	US15PHC4-150/100	1 u
250 x 10.0 mm	US5PHC4-250/100	1 u	US10PHC4-250/100	1 u	US15PHC4-250/100	1 u
50 x 21.2 mm	US5PHC4-050/212	1 u	US10PHC4-050/212	1 u	US15PHC4-050/212	1 u
100 x 21.2 mm	US5PHC4-100/212	1 u	US10PHC4-100/212	1 u	US15PHC4-100/212	1 u
150 x 21.2 mm	US5PHC4-150/212	1 u	US10PHC4-150/212	1 u	US15PHC4-150/212	1 u
250 x 21.2 mm	US5PHC4-250/212	1 u	US10PHC4-250/212	1 u	US15PHC4-250/212	1 u
50 x 30.0 mm	US5PHC4-050/300	1 u	US10PHC4-050/300	1 u	US15PHC4-050/300	1 u
100 x 30.0 mm	US5PHC4-100/300	1 u	US10PHC4-100/300	1 u	US15PHC4-100/300	1 u
150 x 30.0 mm	US5PHC4-150/300	1 u	US10PHC4-150/300	1 u	US15PHC4-150/300	1 u
250 x 30.0 mm	US5PHC4-250/300	1 u	US10PHC4-250/300	1 u	US15PHC4-250/300	1 u
50 x 50.0 mm	US5PHC4-050/500	1 u	US10PHC4-050/500	1 u	US15PHC4-050/500	1 u
250 x 50.0 mm	US5PHC4-250/500	1 u	US10PHC4-250/500	1 u	US15PHC4-250/500	1 u

### puriFlash® RP-AQ

Flash Columns	15µm	Qty	30µm	Qty
F0001	SC-15RPAQ-F0001	25u	---	---
F0004	PF-15RPAQ-F0004	4u	PF-30RPAQ-F0004	4u
F0012	PF-15RPAQ-F0012	2u	PF-30RPAQ-F0012	2u
F0025	PF-15RPAQ-F0025	1u	PF-30RPAQ-F0025	1u
F0040	PF-15RPAQ-F0040	1u	PF-30RPAQ-F0040	1u
F0080	PF-15RPAQ-F0080	1u	PF-30RPAQ-F0080	1u
F0120	PF-15RPAQ-F0120	1u	PF-30RPAQ-F0120	1u
F0220	PF-15RPAQ-F0220	1u	PF-30RPAQ-F0220	1u
F0330	PF-15RPAQ-F0330	1u	PF-30RPAQ-F0330	1u
F0800	---	---	PF-30RPAQ-F0800	1u
F1600	---	---	PF-30RPAQ-F1600	1u

### puriFlash® C18-STD

Flash columns	50 µm	Qty
F0004	IR-50C18-F0004	4 u
F0012	IR-50C18-F0012	2 u
F0025	IR-50C18-F0025	1 u
F0040	IR-50C18-F0040	1 u
F0080	IR-50C18-F0080	1 u
F0120	IR-50C18-F0120	1 u
F0220	IR-50C18-F0220	1 u
F0330	IR-50C18-F0330	1 u
F0800	IR-50C18-F0800	1 u
F1600	IR-50C18-F1600	1 u



### IA chiral

20 µm

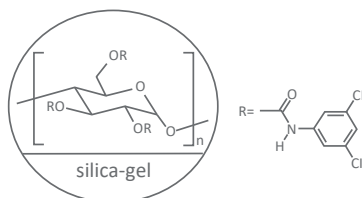
 Amylose tris-(3,5-dimethylphenyl carbamate)  
 Immobilized on silica gel

 Chiral compounds in normal and reverse phase such  
 as Bupivacaine, Indapamide, suproferm...

### puriFlash® Chiral IA

Flash columns	20 µm	Qty
F0004	CT-20IA-F0004	1 u
F0012	CT-20IA-F0012	1 u
F0025	CT-20IA-F0025	1 u
F0040	CT-20IA-F0040	1 u
F0080	CT-20IA-F0080	1 u
F0120	CT-20IA-F0120	1 u
F0220	CT-20IA-F0220	1 u

#### APPLICATION AREA

 HPLC   
 Prep-LC   
 Flash 


### IC chiral

20 µm

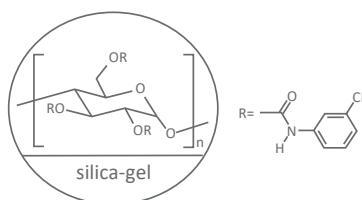
 Cellulose tris-(3,5-dichlorophenyl carbamate)  
 Immobilized on silica gel

 Chiral compounds in normal and inverse phase, such  
 as Econazole, Indoprofen, 5-Fluoro-1 (tetrahydro-2-  
 furyl) uracil, etc.

### puriFlash® Chiral IC

Flash columns	20 µm	Qty
F0004	CT-20IC-F0004	1 u
F0012	CT-20IC-F0012	1 u
F0025	CT-20IC-F0025	1 u
F0040	CT-20IC-F0040	1 u

#### APPLICATION AREA

 HPLC   
 Prep-LC   
 Flash 


### ID chiral

20 µm

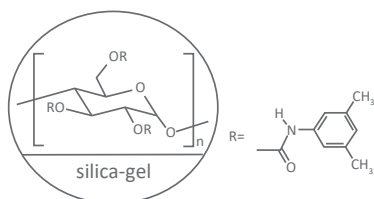
 Amylose tris-(3-Chlorophenyl carbamate) Immobilized  
 on silica gel

 Chiral compounds in normal and reverse phase such  
 as (±)-Hydrobenzoin, Sulconazole,  
 Tropic acid...

### puriFlash® Chiral ID

Flash columns	20 µm	Qty
F0004	CT-20ID-F0004	1 u
F0012	CT-20ID-F0012	1 u
F0025	CT-20ID-F0025	1 u
F0040	CT-20ID-F0040	1 u

#### APPLICATION AREA

 HPLC   
 Prep-LC   
 Flash 


### OD-I chiral

20 µm

 Cellulose tris-(3,5 dimethylphenyl carbamate)  
 Immobilized on silica gel

 Chiral compounds in normal and reverse phase such as  
 2-Bromomethyl-1,4-benzodioxane, pindolol,  
 Troger's Base, etc.

### puriFlash® Chiral OD-I

Flash columns	20 µm	Qty
F0004	CT-20OD-F0004	1 u
F0012	CT-20OD-F0012	1 u
F0025	CT-20OD-F0025	1 u
F0040	CT-20OD-F0040	1 u

#### APPLICATION AREA

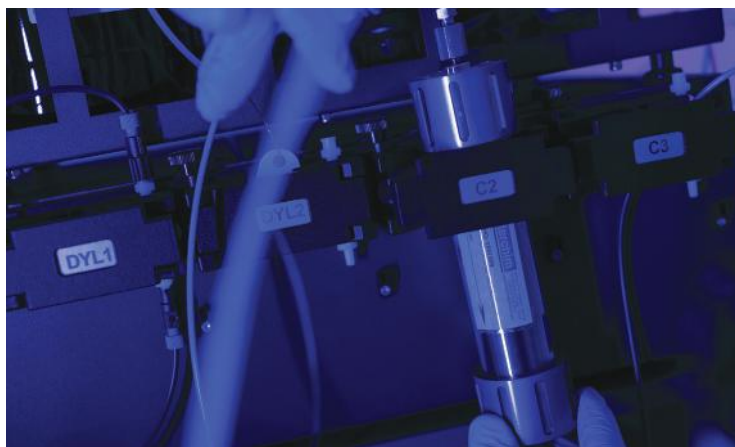
 HPLC   
 Prep-LC   
 Flash 


## Selection Guide

Peptides	Polar	Mid & non-polar	Hydrophobic	Natural, Fatty Acids
<p>&lt; 40 AA MW: up to 5KDa</p> <p>pH: 1.5 to 8.0</p> <p>max. pH: 10</p>	puriFlash® BIO 100 C18N	puriFlash® BIO 100 C18T  puriFlash® BIO 100 C18XS	Screening of puriFlash® BIO 100 (C18N /C18T)  puriFlash® BIO 100 C18XS	
<p>&lt; 80 AA MW: up to 10KDa</p> <p>pH: 1.5 to 8.0</p> <p>max. pH: 10</p>	puriFlash® BIO 200 C18N	puriFlash® BIO 200 C18T  puriFlash® BIO 200 C18XS	Screening of puriFlash® BIO 200 (C18N /C18T)  puriFlash® BIO 200 C18XS	
<p>&lt; 160 AA MW: up to 20KDa</p> <p>pH: 1.5 to 8.0</p>	puriFlash® BIO 200 C18N	puriFlash® BIO 200 C8N	puriFlash® BIO 200 C8N	
<p>&lt; 80AA MW: up to 100KDa</p> <p>pH: 1.5 to 8.0</p>				puriFlash® BIO 300 C4AQ

In-Process QA/QC of Peptides Synthesis

puriFlash® BIO CS 2.6C18N =&gt; puriFlash® BIO 100 2.5C18N





puriFlash® Bio columns - For peptides

puriFlash® BIO 100 C18-N

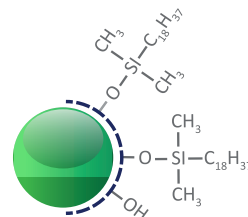
Prep-LC columns	5 µm	Qty	10 µm	Qty	15 µm	Qty
250 x 4.6 mm	PFB5C18N-250/P46	1 u	PFB10C18N-250/P46	1 u	PFB15C18N-250/P46	1 u
150 x 10.0 mm	PFB5C18N-150/100	1 u	PFB10C18N-150/100	1 u	PFB15C18N-150/100	1 u
250 x 10.0 mm	PFB5C18N-250/100	1 u	PFB10C18N-250/100	1 u	PFB15C18N-250/100	1 u
50 x 21.2 mm	PFB5C18N-050/212	1 u	PFB10C18N-050/212	1 u	PFB15C18N-050/212	1 u
100 x 21.2 mm	PFB5C18N-100/212	1 u	PFB10C18N-100/212	1 u	PFB15C18N-100/212	1 u
150 x 21.2 mm	PFB5C18N-150/212	1 u	PFB10C18N-150/212	1 u	PFB15C18N-150/212	1 u
250 x 21.2 mm	PFB5C18N-250/212	1 u	PFB10C18N-250/212	1 u	PFB15C18N-250/212	1 u
50 x 30.0 mm	PFB5C18N-050/300	1 u	PFB10C18N-050/300	1 u	PFB15C18N-050/300	1 u
100 x 30.0 mm	PFB5C18N-100/300	1 u	PFB10C18N-100/300	1 u	PFB15C18N-100/300	1 u
150 x 30.0 mm	PFB5C18N-150/300	1 u	PFB10C18N-150/300	1 u	PFB15C18N-150/300	1 u
250 x 30.0 mm	PFB5C18N-250/300	1 u	PFB10C18N-250/300	1 u	PFB15C18N-250/300	1 u
50 x 50.0 mm	PFB5C18N-050/500	1 u	PFB10C18N-050/500	1 u	PFB15C18N-050/500	1 u
250 x 50.0 mm	PFB5C18N-250/500	1 u	PFB10C18N-250/500	1 u	PFB15C18N-250/500	1 u

Flash columns	15 µm	Qty	30 µm	Qty
F0004	PFB-15C18N-F0004	4 u	PFB-30C18N-F0004	4 u
F0012	PFB-15C18N-F0012	2 u	PFB-30C18N-F0012	2 u
F0025	PFB-15C18N-F0025	1 u	PFB-30C18N-F0025	1 u
F0040	PFB-15C18N-F0040	1 u	PFB-30C18N-F0040	1 u
F0080	PFB-15C18N-F0080	1 u	PFB-30C18N-F0080	1 u
F0120	PFB-15C18N-F0120	1 u	PFB-30C18N-F0120	1 u
F0220	PFB-15C18N-F0220	1 u	PFB-30C18N-F0220	1 u
F0330	PFB-15C18N-F0330	1 u	PFB-30C18N-F0330	1 u
F0800	---	---	PFB-30C18N-F0800	1 u
F1600	---	---	PFB-30C18N-F1600	1 u

puriFlash® BIO 100 C18-T

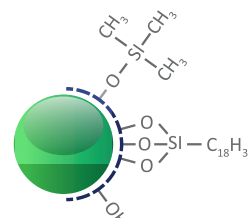
Prep-LC columns	5 µm	Qty	10 µm	Qty	15 µm	Qty
250 x 4.6 mm	PFB5C18T-250/P46	1 u	PFB10C18T-250/P46	1 u	PFB15C18T-250/P46	1 u
150 x 10.0 mm	PFB5C18T-150/100	1 u	PFB10C18T-150/100	1 u	PFB15C18T-150/100	1 u
250 x 10.0 mm	PFB5C18T-250/100	1 u	PFB10C18T-250/100	1 u	PFB15C18T-250/100	1 u
50 x 21.2 mm	PFB5C18T-050/212	1 u	PFB10C18T-050/212	1 u	PFB15C18T-050/212	1 u
100 x 21.2 mm	PFB5C18T-100/212	1 u	PFB10C18T-100/212	1 u	PFB15C18T-100/212	1 u
150 x 21.2 mm	PFB5C18T-150/212	1 u	PFB10C18T-150/212	1 u	PFB15C18T-150/212	1 u
250 x 21.2 mm	PFB5C18T-250/212	1 u	PFB10C18T-250/212	1 u	PFB15C18T-250/212	1 u
50 x 30.0 mm	PFB5C18T-050/300	1 u	PFB10C18T-050/300	1 u	PFB15C18T-050/300	1 u
100 x 30.0 mm	PFB5C18T-100/300	1 u	PFB10C18T-100/300	1 u	PFB15C18T-100/300	1 u
150 x 30.0 mm	PFB5C18T-150/300	1 u	PFB10C18T-150/300	1 u	PFB15C18T-150/300	1 u
250 x 30.0 mm	PFB5C18T-250/300	1 u	PFB10C18T-250/300	1 u	PFB15C18T-250/300	1 u
50 x 50.0 mm	PFB5C18T-050/500	1 u	PFB10C18T-050/500	1 u	PFB15C18T-050/500	1 u
250 x 50.0 mm	PFB5C18T-250/500	1 u	PFB10C18T-250/500	1 u	PFB15C18T-250/500	1 u

Flash columns	15 µm	Qty	30 µm	Qty
F0004	PFB-15C18T-F0004	4 u	PFB-30C18T-F0004	4 u
F0012	PFB-15C18T-F0012	2 u	PFB-30C18T-F0012	2 u
F0025	PFB-15C18T-F0025	1 u	PFB-30C18T-F0025	1 u
F0040	PFB-15C18T-F0040	1 u	PFB-30C18T-F0040	1 u
F0080	PFB-15C18T-F0080	1 u	PFB-30C18T-F0080	1 u
F0120	PFB-15C18T-F0120	1 u	PFB-30C18T-F0120	1 u
F0220	PFB-15C18T-F0220	1 u	PFB-30C18T-F0220	1 u
F0330	PFB-15C18T-F0330	1 u	PFB-30C18T-F0330	1 u
F0800	---	---	PFB-30C18T-F0800	1 u
F1600	---	---	PFB-30C18T-F1600	1 u



puriFlash® BIO C18-N

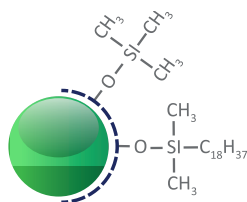
100 Å - 320 m<sup>2</sup>/g  
 2.5 ; 3.5 ; 5 ; 10 ; 15 & 30 µm  
 C18 - octadecyl  
 Mono-functional  
 %C: 15.0  
 End-capping: None  
 pH stability: 1.5 to 8.0  
 Use mode: Reverse  
*In-Process QA/QC of Peptides  
 Synthesis, Analysis & Purification  
 of polar Peptides with less than  
 40AA & mw. up to 5KDa under  
 pseudo hilic mode with 85% to 95%  
 ACN. Analysis & Purification of  
 hydrophobic Peptides with less than  
 40AA & mw. up to 5KDa.*



puriFlash® BIO C18-T

100 Å - 320 m<sup>2</sup>/g  
 2.5 ; 3.5 ; 5 ; 10, 15 & 30 µm  
 C18 - octadecyl  
 Tri-functional  
 %C: 17.0  
 End-capping : One-step  
 pH stability: 1.5 to 8.0  
 Use mode: Reverse  
*Analysis & Purification of mid & non-  
 polar Peptides, hydrophobic Peptides  
 with less than 40AA &  
 mw. up to 5KDa.*

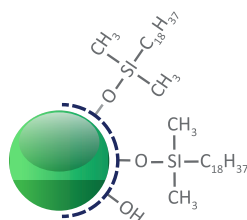




## puriFlash® BIO C18-XS

100 Å - 320 m<sup>2</sup>/g  
 2.5 ; 3.5 ; 5 ; 10, 15 & 30 µm  
 C18 - octadecyl  
 Mono-functional  
 %C: 17.0  
 End-capping: Multi-step  
 pH stability: 1.0 to 10.0  
 Use mode: Reverse

Analysis & Purification of mid & non-polar Peptides, hydrophobic Peptides with less than 40AA & mw. up to 5KDa under basic conditions up to pH: 10.0



## puriFlash® BIO C18-N

200 Å - 200 m<sup>2</sup>/g  
 2.5 ; 3.5 ; 5 ; 10 ; 15 & 30 µm  
 C18 - octadecyl  
 Mono-functional  
 %C: 7.0  
 End-capping: None  
 pH stability: 1.5 to 8.0  
 Use mode: Reverse

In-Process QA/QC of Peptides Synthesis. Analysis & Purification of polar Peptides with less than 40AA & mw. up to 5KDa under pseudo hilic mode with 85% to 95% ACN. Analysis & Purification of hydrophobic Peptides with less than 40AA & mw. up to 5KDa.

## puriFlash® BIO 100 C18-XS

Prep-LC columns	5 µm	Qty	10 µm	Qty	15 µm	Qty
250 x 4.6 mm	PFB5C18XS-250/P46	1 u	PFB10C18XS-250/P46	1 u	PFB15C18XS-250/P46	1 u
150 x 10.0 mm	PFB5C18XS-150/100	1 u	PFB10C18XS-150/100	1 u	PFB15C18XS-150/100	1 u
250 x 10.0 mm	PFB5C18XS-250/100	1 u	PFB10C18XS-250/100	1 u	PFB15C18XS-250/100	1 u
50 x 21.2 mm	PFB5C18XS-050/212	1 u	PFB10C18XS-050/212	1 u	PFB15C18XS-050/212	1 u
100 x 21.2 mm	PFB5C18XS-100/212	1 u	PFB10C18XS-100/212	1 u	PFB15C18XS-100/212	1 u
150 x 21.2 mm	PFB5C18XS-150/212	1 u	PFB10C18XS-150/212	1 u	PFB15C18XS-150/212	1 u
250 x 21.2 mm	PFB5C18XS-250/212	1 u	PFB10C18XS-250/212	1 u	PFB15C18XS-250/212	1 u
50 x 30.0 mm	PFB5C18XS-050/300	1 u	PFB10C18XS-050/300	1 u	PFB15C18XS-050/300	1 u
100 x 30.0 mm	PFB5C18XS-100/300	1 u	PFB10C18XS-100/300	1 u	PFB15C18XS-100/300	1 u
150 x 30.0 mm	PFB5C18XS-150/300	1 u	PFB10C18XS-150/300	1 u	PFB15C18XS-150/300	1 u
250 x 30.0 mm	PFB5C18XS-250/300	1 u	PFB10C18XS-250/300	1 u	PFB15C18XS-250/300	1 u
50 x 50.0 mm	PFB5C18XS-050/500	1 u	PFB10C18XS-050/500	1 u	PFB15C18XS-050/500	1 u
250 x 50.0 mm	PFB5C18XS-250/500	1 u	PFB10C18XS-250/500	1 u	PFB15C18XS-250/500	1 u

Flash columns	15 µm	Qty	30 µm	Qty
F0004	PFB-15C18XS-F0004	4 u	PFB-30C18XS-F0004	4 u
F0012	PFB-15C18XS-F0012	2 u	PFB-30C18XS-F0012	2 u
F0025	PFB-15C18XS-F0025	1 u	PFB-30C18XS-F0025	1 u
F0040	PFB-15C18XS-F0040	1 u	PFB-30C18XS-F0040	1 u
F0080	PFB-15C18XS-F0080	1 u	PFB-30C18XS-F0080	1 u
F0120	PFB-15C18XS-F0120	1 u	PFB-30C18XS-F0120	1 u
F0220	PFB-15C18XS-F0220	1 u	PFB-30C18XS-F0220	1 u
F0330	PFB-15C18XS-F0330	1 u	PFB-30C18XS-F0330	1 u
F0800	---	---	PFB-30C18XS-F0800	1 u
F1600	---	---	PFB-30C18XS-F1600	1 u

## puriFlash® BIO 200 C18-N

Prep-LC columns	5 µm	Qty	10 µm	Qty	15 µm	Qty
250 x 4.6 mm	PT5C18N-250/P46	1 u	PT10C18N-250/P46	1 u	PT15C18N-250/P46	1 u
150 x 10.0 mm	PT5C18N-150/100	1 u	PT10C18N-150/100	1 u	PT15C18N-150/100	1 u
250 x 10.0 mm	PT5C18N-250/100	1 u	PT10C18N-250/100	1 u	PT15C18N-250/100	1 u
50 x 21.2 mm	PT5C18N-050/212	1 u	PT10C18N-050/212	1 u	PT15C18N-050/212	1 u
100 x 21.2 mm	PT5C18N-100/212	1 u	PT10C18N-100/212	1 u	PT15C18N-100/212	1 u
150 x 21.2 mm	PT5C18N-150/212	1 u	PT10C18N-150/212	1 u	PT15C18N-150/212	1 u
250 x 21.2 mm	PT5C18N-250/212	1 u	PT10C18N-250/212	1 u	PT15C18N-250/212	1 u
50 x 30.0 mm	PT5C18N-050/300	1 u	PT10C18N-050/300	1 u	PT15C18N-050/300	1 u
100 x 30.0 mm	PT5C18N-100/300	1 u	PT10C18N-100/300	1 u	PT15C18N-100/300	1 u
150 x 30.0 mm	PT5C18N-150/300	1 u	PT10C18N-150/300	1 u	PT15C18N-150/300	1 u
250 x 30.0 mm	PT5C18N-250/300	1 u	PT10C18N-250/300	1 u	PT15C18N-250/300	1 u
50 x 50.0 mm	PT5C18N-050/500	1 u	PT10C18N-050/500	1 u	PT15C18N-050/500	1 u
250 x 50.0 mm	PT5C18N-250/500	1 u	PT10C18N-250/500	1 u	PT15C18N-250/500	1 u

Flash columns	15 µm	Qty	30 µm	Qty
F0004	PT-15C18N-F0004	4 u	PT-30C18N-F0004	4 u
F0012	PT-15C18N-F0012	2 u	PT-30C18N-F0012	2 u
F0025	PT-15C18N-F0025	1 u	PT-30C18N-F0025	1 u
F0040	PT-15C18N-F0040	1 u	PT-30C18N-F0040	1 u
F0080	PT-15C18N-F0080	1 u	PT-30C18N-F0080	1 u
F0120	PT-15C18N-F0120	1 u	PT-30C18N-F0120	1 u
F0220	PT-15C18N-F0220	1 u	PT-30C18N-F0220	1 u
F0330	PT-15C18N-F0330	1 u	PT-30C18N-F0330	1 u
F0800	---	1 u	PT-30C18N-F0800	1 u
F1600	---	1 u	PT-30C18N-F1600	1 u

puriFlash® Bio columns - For peptides

puriFlash® BIO 200 C18-T

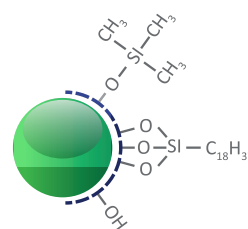
Prep-LC columns	5 µm	Qty	10 µm	Qty	15 µm	Qty
250 x 4.6 mm	PT5C18T-250/P46	1 u	PT10C18T-250/P46	1 u	PT15C18T-250/P46	1 u
150 x 10.0 mm	PT5C18T-150/100	1 u	PT10C18T-150/100	1 u	PT15C18T-150/100	1 u
250 x 10.0 mm	PT5C18T-250/100	1 u	PT10C18T-250/100	1 u	PT15C18T-250/100	1 u
50 x 21.2 mm	PT5C18T-050/212	1 u	PT10C18T-050/212	1 u	PT15C18T-050/212	1 u
100 x 21.2 mm	PT5C18T-100/212	1 u	PT10C18T-100/212	1 u	PT15C18T-100/212	1 u
150 x 21.2 mm	PT5C18T-150/212	1 u	PT10C18T-150/212	1 u	PT15C18T-150/212	1 u
250 x 21.2 mm	PT5C18T-250/212	1 u	PT10C18T-250/212	1 u	PT15C18T-250/212	1 u
50 x 30.0 mm	PT5C18T-050/300	1 u	PT10C18T-050/300	1 u	PT15C18T-050/300	1 u
100 x 30.0 mm	PT5C18T-100/300	1 u	PT10C18T-100/300	1 u	PT15C18T-100/300	1 u
150 x 30.0 mm	PT5C18T-150/300	1 u	PT10C18T-150/300	1 u	PT15C18T-150/300	1 u
250 x 30.0 mm	PT5C18T-250/300	1 u	PT10C18T-250/300	1 u	PT15C18T-250/300	1 u
50 x 50.0 mm	PT5C18T-050/500	1 u	PT10C18T-050/500	1 u	PT15C18T-050/500	1 u
250 x 50.0 mm	PT5C18T-250/500	1 u	PT10C18T-250/500	1 u	PT15C18T-250/500	1 u

Flash columns	15 µm	Qty	30 µm	Qty
F0004	PT-15C18T-F0004	4 u	PT-30C18T-F0004	4 u
F0012	PT-15C18T-F0012	2 u	PT-30C18T-F0012	2 u
F0025	PT-15C18T-F0025	1 u	PT-30C18T-F0025	1 u
F0040	PT-15C18T-F0040	1 u	PT-30C18T-F0040	1 u
F0080	PT-15C18T-F0080	1 u	PT-30C18T-F0080	1 u
F0120	PT-15C18T-F0120	1 u	PT-30C18T-F0120	1 u
F0220	PT-15C18T-F0220	1 u	PT-30C18T-F0220	1 u
F0330	PT-15C18T-F0330	1 u	PT-30C18T-F0330	1 u
F0800	---	---	PT-30C18T-F0800	1 u
F1600	---	---	PT-30C18T-F1600	1 u

puriFlash® BIO 200 C18-XS

Prep-LC columns	5 µm	Qty	10 µm	Qty	15 µm	Qty
250 x 4.6 mm	PT5C18XS-250/P46	1 u	PT10C18XS-250/P46	1 u	PT15C18XS-250/P46	1 u
150 x 10.0 mm	PT5C18XS-150/100	1 u	PT10C18XS-150/100	1 u	PT15C18XS-150/100	1 u
250 x 10.0 mm	PT5C18XS-250/100	1 u	PT10C18XS-250/100	1 u	PT15C18XS-250/100	1 u
50 x 21.2 mm	PT5C18XS-050/212	1 u	PT10C18XS-050/212	1 u	PT15C18XS-050/212	1 u
100 x 21.2 mm	PT5C18XS-100/212	1 u	PT10C18XS-100/212	1 u	PT15C18XS-100/212	1 u
150 x 21.2 mm	PT5C18XS-150/212	1 u	PT10C18XS-150/212	1 u	PT15C18XS-150/212	1 u
250 x 21.2 mm	PT5C18XS-250/212	1 u	PT10C18XS-250/212	1 u	PT15C18XS-250/212	1 u
50 x 30.0 mm	PT5C18XS-050/300	1 u	PT10C18XS-050/300	1 u	PT15C18XS-050/300	1 u
100 x 30.0 mm	PT5C18XS-100/300	1 u	PT10C18XS-100/300	1 u	PT15C18XS-100/300	1 u
150 x 30.0 mm	PT5C18XS-150/300	1 u	PT10C18XS-150/300	1 u	PT15C18XS-150/300	1 u
250 x 30.0 mm	PT5C18XS-250/300	1 u	PT10C18XS-250/300	1 u	PT15C18XS-250/300	1 u
50 x 50.0 mm	PT5C18XS-050/500	1 u	PT10C18XS-050/500	1 u	PT15C18XS-050/500	1 u
250 x 50.0 mm	PT5C18XS-250/500	1 u	PT10C18XS-250/500	1 u	PT15C18XS-250/500	1 u

Flash columns	15 µm	Qty	30 µm	Qty
F0004	PT-15C18XS-F0004	4 u	PT-30C18XS-F0004	4 u
F0012	PT-15C18XS-F0012	2 u	PT-30C18XS-F0012	2 u
F0025	PT-15C18XS-F0025	1 u	PT-30C18XS-F0025	1 u
F0040	PT-15C18XS-F0040	1 u	PT-30C18XS-F0040	1 u
F0080	PT-15C18XS-F0080	1 u	PT-30C18XS-F0080	1 u
F0120	PT-15C18XS-F0120	1 u	PT-30C18XS-F0120	1 u
F0220	PT-15C18XS-F0220	1 u	PT-30C18XS-F0220	1 u
F0330	PT-15C18XS-F0330	1 u	PT-30C18XS-F0330	1 u
F0800	---	---	PT-30C18XS-F0800	1 u
F1600	---	---	PT-30C18XS-F1600	1 u

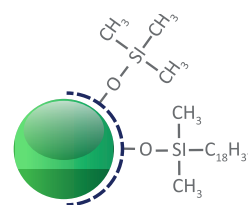


puriFlash® BIO C18-T

200 Å - 200 m<sup>2</sup>/g  
 2.5 ; 3.5 ; 5 ; 10, 15 & 30 µm  
 C18 - octadecyl  
 Tri-functional  
 %C: 10.0

End-capping : One-step  
 pH stability: 1.5 to 8.0  
 Use mode: Reverse

Analysis & Purification of mid & non-polar Peptides, hydrophobic Peptides with less than 40AA & mw. up to 5KDa.



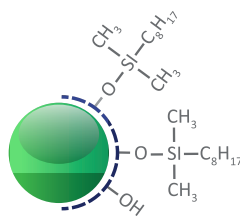
puriFlash® BIO C18-XS

200 Å - 200 m<sup>2</sup>/g  
 2.5 ; 3.5 ; 5 ; 10, 15 & 30 µm  
 C18 - octadecyl  
 Mono-functional  
 %C: 8.0

End-capping: Multi-step  
 pH stability: 1.0 to 10.0  
 Use mode: Reverse

Analysis & Purification of mid & non-polar Peptides, hydrophobic Peptides with less than 40AA & mw. up to 5KDa under basic conditions up to pH: 10.0





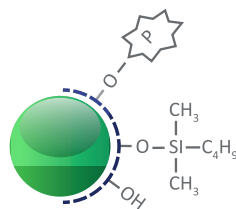
## puriFlash® BIO C8-N

200 Å - 200 m<sup>2</sup>/g  
2.5 ; 3.5 ; 5 ; 10, 15 & 30 µm  
C18 - octadecyl  
Mono-functional  
%C: 7.0

End-capping : Non  
pH stability: 1.5 to 8.0

Use mode: Reverse

*Analysis & Purification of polar Peptides less than 160AA & mw. up to 20KDa under pseudo hilic mode with 85% to- 95% ACN. Analysis & Purification of hydrophobic Peptides with less than 80AA & mw. up to 10KDa.*



## puriFlash® BIO C4-AQ

300 Å - 100 m<sup>2</sup>/g  
3,5 ; 5 ; 10 ; 15 & 30 µm  
C4 - butyl  
Mono-functional  
%C: 3.0

End-capping: Mixte  
pH stability: 1.5 to 8.0

Use mode: Reverse

*Analysis & Purification of natural Peptides, fatty acids with larger than 80AA & mw. up to 100KDa.*

## puriFlash® BIO 200 C8-N

Prep-LC columns	5 µm	Qty	10 µm	Qty	15 µm	Qty
250 x 4.6 mm	PT5C8N-250/P46	1 u	PT10C8N-250/P46	1 u	PT15C8N-250/P46	1 u
150 x 10.0 mm	PT5C8N-150/100	1 u	PT10C8N-150/100	1 u	PT15C8N-150/100	1 u
250 x 10.0 mm	PT5C8N-250/100	1 u	PT10C8N-250/100	1 u	PT15C8N-250/100	1 u
50 x 21.2 mm	PT5C8N-050/212	1 u	PT10C8N-050/212	1 u	PT15C8N-050/212	1 u
100 x 21.2 mm	PT5C8N-100/212	1 u	PT10C8N-100/212	1 u	PT15C8N-100/212	1 u
150 x 21.2 mm	PT5C8N-150/212	1 u	PT10C8N-150/212	1 u	PT15C8N-150/212	1 u
250 x 21.2 mm	PT5C8N-250/212	1 u	PT10C8N-250/212	1 u	PT15C8N-250/212	1 u
50 x 30.0 mm	PT5C8N-050/300	1 u	PT10C8N-050/300	1 u	PT15C8N-050/300	1 u
100 x 30.0 mm	PT5C8N-100/300	1 u	PT10C8N-100/300	1 u	PT15C8N-100/300	1 u
150 x 30.0 mm	PT5C8N-150/300	1 u	PT10C8N-150/300	1 u	PT15C8N-150/300	1 u
250 x 30.0 mm	PT5C8N-250/300	1 u	PT10C8N-250/300	1 u	PT15C8N-250/300	1 u
50 x 50.0 mm	PT5C8N-050/500	1 u	PT10C8N-050/500	1 u	PT15C8N-050/500	1 u
250 x 50.0 mm	PT5C8N-250/500	1 u	PT10C8N-250/500	1 u	PT15C8N-250/500	1 u

Flash columns	15 µm	Qty	30 µm	Qty
F0004	PT-15C8N-F0004	4 u	PT-30C8N-F0004	4 u
F0012	PT-15C8N-F0012	2 u	PT-30C8N-F0012	2 u
F0025	PT-15C8N-F0025	1 u	PT-30C8N-F0025	1 u
F0040	PT-15C8N-F0040	1 u	PT-30C8N-F0040	1 u
F0080	PT-15C8N-F0080	1 u	PT-30C8N-F0080	1 u
F0120	PT-15C8N-F0120	1 u	PT-30C8N-F0120	1 u
F0220	PT-15C8N-F0220	1 u	PT-30C8N-F0220	1 u
F0330	PT-15C8N-F0330	1 u	PT-30C8N-F0330	1 u
F0800	---	---	PT-30C8N-F0800	1 u
F1600	---	---	PT-30C8N-F1600	1 u

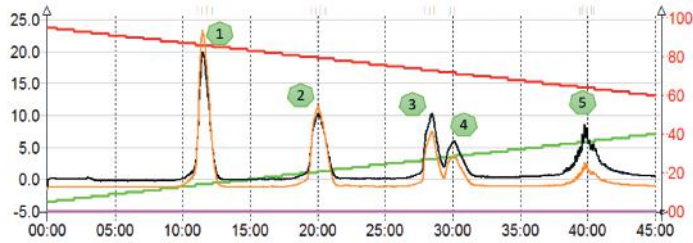
## puriFlash® BIO 300 C4-AQ

Prep-LC columns	5 µm	Qty	10 µm	Qty	15 µm	Qty
250 x 4.6 mm	PP5C4AQ-250/P46	1 u	PP10C4AQ-250/P46	1 u	PP15C4AQ-250/P46	1 u
150 x 10.0 mm	PP5C4AQ-150/100	1 u	PP10C4AQ-150/100	1 u	PP15C4AQ-150/100	1 u
250 x 10.0 mm	PP5C4AQ-250/100	1 u	PP10C4AQ-250/100	1 u	PP15C4AQ-250/100	1 u
50 x 21.2 mm	PP5C4AQ-050/212	1 u	PP10C4AQ-050/212	1 u	PP15C4AQ-050/212	1 u
100 x 21.2 mm	PP5C4AQ-100/212	1 u	PP10C4AQ-100/212	1 u	PP15C4AQ-100/212	1 u
150 x 21.2 mm	PP5C4AQ-150/212	1 u	PP10C4AQ-150/212	1 u	PP15C4AQ-150/212	1 u
250 x 21.2 mm	PP5C4AQ-250/212	1 u	PP10C4AQ-250/212	1 u	PP15C4AQ-250/212	1 u
50 x 30.0 mm	PP5C4AQ-050/300	1 u	PP10C4AQ-050/300	1 u	PP15C4AQ-050/300	1 u
100 x 30.0 mm	PP5C4AQ-100/300	1 u	PP10C4AQ-100/300	1 u	PP15C4AQ-100/300	1 u
150 x 30.0 mm	PP5C4AQ-150/300	1 u	PP10C4AQ-150/300	1 u	PP15C4AQ-150/300	1 u
250 x 30.0 mm	PP5C4AQ-250/300	1 u	PP10C4AQ-250/300	1 u	PP15C4AQ-250/300	1 u
50 x 50.0 mm	PP5C4AQ-050/500	1 u	PP10C4AQ-050/500	1 u	PP15C4AQ-050/500	1 u
250 x 50.0 mm	PP5C4AQ-250/500	1 u	PP10C4AQ-250/500	1 u	PP15C4AQ-250/500	1 u

Flash columns	15 µm	Qty	30 µm	Qty
F0004	PP-15C4AQ-F0004	4 u	PP-30C4AQ-F0004	4 u
F0012	PP-15C4AQ-F0012	2 u	PP-30C4AQ-F0012	2 u
F0025	PP-15C4AQ-F0025	1 u	PP-30C4AQ-F0025	1 u
F0040	PP-15C4AQ-F0040	1 u	PP-30C4AQ-F0040	1 u
F0080	PP-15C4AQ-F0080	1 u	PP-30C4AQ-F0080	1 u
F0120	PP-15C4AQ-F0120	1 u	PP-30C4AQ-F0120	1 u
F0220	PP-15C4AQ-F0220	1 u	PP-30C4AQ-F0220	1 u
F0330	PP-15C4AQ-F0330	1 u	PP-30C4AQ-F0330	1 u
F0800	---	---	PP-30C4AQ-F0800	1 u
F1600	---	---	PP-30C4AQ-F1600	1 u

PEPTIDES DISCRIMINATION / PURIFLASH® BIO 100 VS 200 C18-N

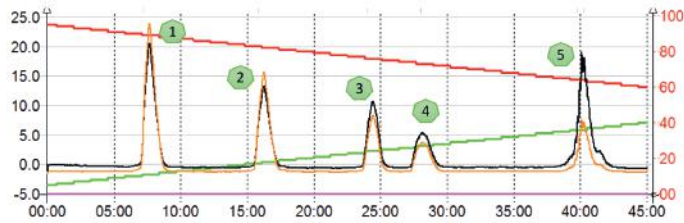
Sample of Peptides & Proteins  
 (1) GLY-TYR (238Da)  
 (2) VAL-TYR-VAL (380Da)  
 (3) Met-Enkephalin (574Da)  
 (4) Angiotensin (1000Da)  
 (5) Cytochrome C from bovine (11749Da)



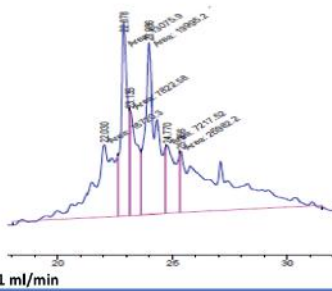
puriFlash Bio 100 C18-N  
 P/N : PFB-15C18N-F025

puriFlash Bio 200 C18-N  
 P/N : PT-15C18N-F025

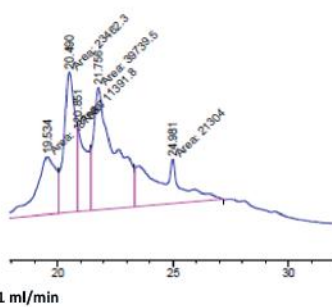
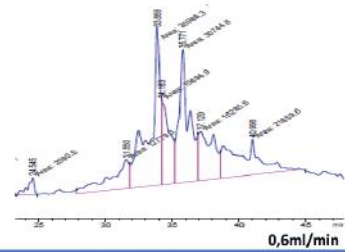
System: puriFlash420 plus  
 Column: Flash 25G format  
 InjVol.: 150µL (columnhead)  
 Solvent A: Water + 0.1%TFA  
 Solvent B: ACN + 0.1%TFA  
 Gradient Table  
 Tps %A %B  
 0:0 95 5  
 45:00 60 40  
 Flow Rate: 15ml/min  
 UV : 215, 254, 280, SCAN 200-400nm



2KDA PEPTIDES DISCRIMINATION / PURIFLASH® BIO 100

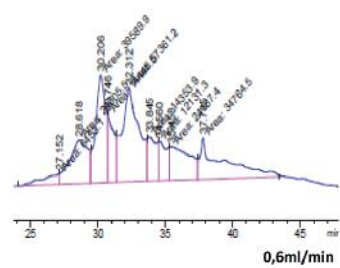


puriFlash® Bio 100 5µm C18-N  
 Non end capped  
 P/N: PFB5C18N-250/046



puriFlash® Bio 100 5µm C18-T  
 Tri functional graft  
 P/N: PFB5C18T-250/046

Mobile phase  
 A: H<sub>2</sub>O + 0,1% TFA  
 B: ACN + 0,1% TFA  
 Gradient: A => B  
 Slope at 0.74 %/min  
 Injection Volume: 25µl  
 Peptide 1: ~ 2 Kda



=> Lower flow rate impact the peptide's resolution



### Dynamic axial compression column, DAC

The DAC (Dynamic Axial Compression) column, is a unique combination of preparative column and packing system. Very simple, the column can be used inline when packed. The piston of the column produces a constant on the phase bed which prevents from collapse or rapid deterioration. They can be packed with small particle sizes to achieve high performance levels.



#### 50 mm column

DAC50	
P/N	KV7351
Start up install kit P/N	KV7361
Column ID	50 mm
Column length	650 mm
Column inner wall roughness ( $\mu\text{m}$ )	$\leq 0.1 \mu\text{m}$
Effective packing height	$\leq 450 \text{ mm}$
Column end cap connection type Quick chain clamp locking	Quick chain clamp locking
	SUS316L
Wetted material	Outside dimension
	Packing method
Outside dimension	650 x 650 x 2021 mm
Packing method	Down packing method



#### 80 mm column

DAC80	
P/N	KV7371
Start up install kit P/N	KV7381
Column ID	80 mm
Column length	650 mm
Column inner wall roughness ( $\mu\text{m}$ )	$\leq 0.1 \mu\text{m}$
Effective packing height	$\leq 450 \text{ mm}$
Column end cap connection type Quick chain clamp locking	Quick chain clamp locking
	SUS316L
Wetted material	Outside dimension
	Packing method
Outside dimension	650 x 650 x 2300 mm
Packing method	Down packing method

### 100 mm column

DAC100	
P/N	KV7391
Start up install kit P/N	KV7381
Column ID	100 mm
Column length	650 mm
Column inner wall roughness ( $\mu\text{m}$ )	$\leq 0.1 \mu\text{m}$
Effective packing height	$\leq 450 \text{ mm}$
Column end cap connection type Quick chain clamp locking	Quick chain clamp locking
	SUS316L
Wetted material	Outside dimension
	Packing method
Outside dimension	600 x 600 x 2300 mm
Packing method	Down packing method



### 150 mm column

DAC150	
P/N	KV7411
Start up install kit P/N	KV7381
Column ID	150 mm
Column length	650 mm
Column inner wall roughness ( $\mu\text{m}$ )	$\leq 0.1 \mu\text{m}$
Effective packing height	$\leq 450 \text{ mm}$
Column end cap connection type Quick chain clamp locking	Quick chain clamp locking
	SUS316L
Wetted material	Outside dimension
	Packing method
Outside dimension	650 x 650 x 2345 mm
Packing method	Down packing method



### 200 mm column

DAC200	
P/N	B4ZBP1
Start up install kit P/N	B8DB00
Column ID	200 mm
Column length	680 mm
Column inner wall roughness ( $\mu\text{m}$ )	$\leq 0.2 \mu\text{m}$
Effective packing height	$\leq 450 \text{ mm}$
Column end cap connection type Quick chain clamp locking	Quick chain clamp locking
	SUS316L
Wetted material	Outside dimension
	Packing method
Outside dimension	650 x 650 x 2435 mm
Packing method	Down packing method



# CONSUMABLES

## puriFlash® - Bulk Silicas

### PURIFLASH® SI-HP

Type: Spherical Silica  
 Porosity: 60 Å  
 Surface: 500 m<sup>2</sup>/g  
 Bonding: Silica, grade HP  
 pH stability: 1.5 to 6.5  
 Applications: non-ionic molecules and polar organic molecules.  
 High efficiency.

#### Particle size: 5 µm

P/N /1 kg	PF-5SIHP-1KG
P/N /5 kg	PF-5SIHP-5KG

#### Particle size: 10 µm

P/N /1 kg	PF-10SIHP-1KG
P/N /5 kg	PF-10SIHP-5KG

#### Particle size: 15 µm

P/N /1 kg	PF-15SIHP-1KG
P/N /5 kg	PF-15SIHP-5KG

#### Particle size: 30 µm

P/N /500 g	PF-30SIHP-500G
P/N /1 kg	PF-30SIHP-1KG
P/N /5 kg	PF-30SIHP-5KG

#### Particle size: 50 µm

P/N /1 kg	PF-50SIHP-1KG
P/N /5 kg	PF-50SIHP-5KG
P/N /25 kg	PF-50SIHP-25KG

### PURIFLASH® SI-HC

Type: Spherical Silica  
 Porosity: 60 Å  
 Surface: 680 m<sup>2</sup>/g  
 Bonding: Silica, grade HC  
 pH stability: 1.5 - 6.5  
 Applications: Non-ionic molecules and polar organic molecules.  
 Better loading capacity & productivity.

#### Particle size: 15 µm

P/N /1 kg	PF-15SIHC-1KG
P/N /5 kg	PF-15SIHC-5KG

#### Particle size: 25 µm

P/N /1 kg	PF-25SIHC-1KG
P/N /5 kg	PF-25SIHC-5KG
P/N /25 kg	PF-25SIHC-25KG

#### Particle size: 50 µm

P/N /1 kg	PF-50SIHC-1KG
P/N /5 kg	PF-50SIHC-5KG
P/N /25 kg	PF-50SIHC-25KG

### PURIFLASH® C18-HP

Type: Spherical Silica  
 Porosity: 100 Å  
 Surface: 300 m<sup>2</sup>/g  
 Bonding: C18 - octadecyl monofunctional  
 %C: 16.5 %  
 End-capping: One-step  
 pH stability: 1.5 to 7.5  
 Applications: Pharmaceutical  
 Excellent choice for routine reverse phase purifications.

#### Particle size: 5 µm

P/N /100 g	PF-5C18HP-100G
P/N /1 kg	PF-5C18HP-1KG

#### Particle size: 10 µm

P/N /100 g	PF-10C18HP-100G
P/N /1 kg	PF-10C18HP-1KG

#### Particle size: 15 µm

P/N /1 kg	PF-15C18HP-1KG
P/N /5 kg	PF-15C18HP-5KG

#### Particle size: 30 µm

P/N /1 kg	PF-30C18HP-1KG
P/N /5 kg	PF-30C18HP-5KG

#### Particle size: 50 µm

P/N /1 kg	PF-50C18HP-1KG
P/N /5 kg	PF-50C18HP-5KG

### PURIFLASH® NH2

Type: Spherical Silica  
 Porosity: 100 Å  
 Surface: 300 m<sup>2</sup>/g  
 Bonding: NH2 - amino monofunctional  
 %C: 4.0 %  
 End-capping: One-step  
 pH stability: 2.0 to 6.5  
 Applications: Can be both a weak anion exchanger for strong acids or a polar phase that can interact with the OH, NH, SH...functions.

#### Particle size: 5 µm

P/N /100 g	PF-5NH2-100G
P/N /1 kg	PF-5NH2-1KG

#### Particle size: 10 µm

P/N /100 g	PF-10NH2-100G
P/N /500 g	PF-10NH2-500G
P/N /1 kg	PF-10NH2-1KG

#### Particle size: 15 µm

P/N /100 g	PF-15NH2-100G
P/N /1 kg	PF-15NH2-1KG
P/N /5 kg	PF-15NH2-5KG

### PURIFLASH® C18-AQ

Type: Spherical Silica  
 Porosity: 100 Å  
 Surface: 300 m<sup>2</sup>/g  
 Bonding: C18 - octadecyl monofunctional  
 %C: 14.0 %  
 End-capping: Mixte  
 pH stability: 2.0 to 7.5  
 Applications: The bonding chemistry makes possible to start the gradient at a 100% of water. Suitable for the separation and purification of moderately polar and non-polar molecules.

#### Particle size: 5 µm

P/N /100 g	PF-5C18AQ-100G
P/N /1 kg	PF-5C18AQ-1KG

#### Particle size: 10 µm

P/N /100 g	PF-10C18AQ-100G
P/N /1 kg	PF-10C18AQ-1KG

#### Particle size: 15 µm

P/N /100 g	PF-15C18AQ-100G
P/N /1 kg	PF-15C18AQ-1KG

#### Particle size: 30 µm

P/N /1 kg	PF-30C18AQ-1KG
P/N /5 kg	PF-30C18AQ-5KG

#### Particle size: 30 µm

P/N /100 g	PF-30NH2-100G
P/N /500 g	PF-30NH2-500G
P/N /1 kg	PF-30NH2-1KG
P/N /5 kg	PF-30NH2-5KG

#### Particle size: 50 µm

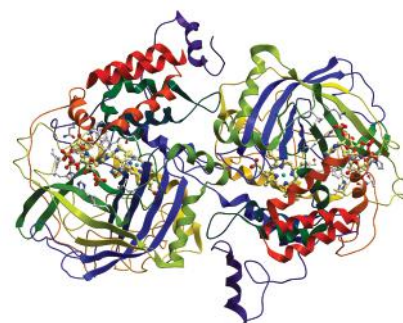
P/N /100 g	PF-50NH2-100G
P/N /500 g	PF-50NH2-500G
P/N /1 kg	PF-50NH2-1KG
P/N /5 kg	PF-50NH2-5KG





## Advion Interchim Scientific® Flash Prep silicas for biological purification

puriFlash® BIO silicas are specially developed to ensure perfect selectivity with peptides and oligonucleotides. Multiple bonding options are available.



### PURIFLASH® BIO 100 C18-N

Type: Spherical Silica  
Porosity: 100 Å  
Surface: 300 m<sup>2</sup>/g  
Bonding: C18 - octadecyl mono-functional  
%C: 15 %  
End-capping: none  
pH stability: 1.5 to 8.0  
Applications: AQ/CQ of peptide synthesis.  
Analysis and purification of polar peptides of less than 40 AA up to 5 kD.

### PURIFLASH® BIO 200 C18T

Type: Spherical Silica  
Porosity: 200 Å  
Surface: 200 m<sup>2</sup>/g  
Bonding: C18 - octadecyl poly-functional  
End-capping: none  
pH stability: 1.5 to 8.0  
Applications: QA/QC of peptide synthesis.  
Analysis and purification of peptides of more than 80 AA to 10 kD.

### PURIFLASH® 100 C18XS

Type: Spherical Silica  
Porosity: 100 Å  
Surface: 300 m<sup>2</sup>/g  
Bonding: C18 - octadecyl mono-functional  
%C: 17 %  
End-capping: none  
pH stability: 1.0 to 10.0  
Applications: Analysis and purification of peptides mid-polar and apolar peptides of less than 40 AA to 5 kD.

#### Particle size: 5 µm

P/N /100 g	PFB-5C18N-100G
P/N /500 g	PFB-5C18N-500G
P/N /1 kg	PFB-5C18N-1KG

#### Particle size: 5 µm

P/N /100 g	PT-5C18T-100G
P/N /500 g	PT-5C18T-500G
P/N /1 kg	PT-5C18T-1KG

#### Particle size: 5 µm

P/N /100 g	PFB-5C18XS-100G
P/N /500 g	PFB-5C18XS-500G
P/N /1 kg	PFB-5C18XS-1KG

#### Particle size: 10 µm

P/N /100 g	PFB-10C18N-100G
P/N /500 g	PFB-10C18N-500G
P/N /1 kg	PFB-10C18N-1KG

#### Particle size: 10 µm

P/N /100 g	PT-10C18T-100G
P/N /500 g	PT-10C18T-500G
P/N /1 kg	PT-10C18T-1KG

#### Particle size: 10 µm

P/N /100 g	PFB-10C18XS-100G
P/N /500 g	PFB-10C18XS-500G
P/N /1 kg	PFB-10C18XS-1KG

#### Particle size: 15 µm

P/N /100 g	PFB-15C18N-100G
P/N /500 g	PFB-15C18N-500G
P/N /1 kg	PFB-15C18N-1KG

#### Particle size: 15 µm

P/N /100 g	PT-15C18T-100G
P/N /500 g	PT-15C18T-500G
P/N /1 kg	PT-15C18T-1KG

#### Particle size: 15 µm

P/N /100g	PFB-15C18XS-100G
P/N /500g	PFB-15C18XS-500G
P/N /1kg	PFB-15C18XS-1KG

#### Particle size: 30 µm

P/N /100 g	PFB-30C18N-100G
P/N /500 g	PFB-30C18N-500G
P/N /1 kg	PFB-30C18N-1KG
P/N /5 kg	PFB-30C18N-5KG

#### Particle size: 30 µm

P/N /100 g	PT-30C18T-100G
P/N /500 g	PT-30C18T-500G
P/N /1 kg	PT-30C18T-1KG
P/N /5 kg	PT-30C18T-5KG

#### Particle size: 30 µm

P/N /100 g	PFB-30C18XS-100G
P/N /500 g	PFB-30C18XS-500G
P/N /1 kg	PFB-30C18XS-1KG
P/N /5 kg	PFB-30C18XS-5KG



### Solid Sample

Dry injection



High pressure dry-load



Allow to large sample amounts

Dry-load columns for solid deposits allow the injection of a raw sample insoluble (or soluble) in the mobile phase.

Compared to liquid injection, the solid deposit avoids the diffusion of raw sample in the purification column. It improves resolution, efficiency and purity of the products collected.

The solid deposit can be made with silica, C18 or Celite. Unlike open cartridges, it does not require the use of a piston or specific adapters.

The max. pressure is 2x the standard solid deposit cartridges.

They are compatible with the use of Interchim® 15µm puriFlash® columns and with all purification systems.

### puriFlash® Dry-Load

Nature	Type	Format	P/N	Qty
puriFlash® Dry-Load	Empty	F0004	PF-DLE-F0004	20u
		F0012	PF-DLE-F0012	20u
		F0025	PF-DLE-F0025	20u
		F0040	PF-DLE-F0040	20u
		F0060	PF-DLE-F0060	10u
		F0080	PF-DLE-F0080	5u
		F0100	PF-DLE-F0100	5u
		F0120	PF-DLE-F0120	5u
		F0220	PF-DLE-F0220	5u
		F0330	PF-DLE-F0330	5u
puriFlash® Dry-Load - Tightening tool			JV0470	1u
puriFlash® Dry-Load	SILICA HC 80 %	F0004	PF-DLE-F0004	20u
		F0012	PF-DLE-F0012	20u
		F0025	PF-DLE-F0025	20u
		F0040	PF-DLE-F0040	20u
puriFlash® Dry-Load	SILICA HC 50 %	F0004	PF-DLSIHC05-F0004	20u
		F0012	PF-DLSIHC05-F0012	20u
		F0025	PF-DLSIHC05-F0025	20u
		F0040	PF-DLSIHC05-F0040	20u
puriFlash® Dry-Load	CELITE 80 %	F0004	PF-DLCET08-F0004	20u
		F0012	PF-DLCET08-F0012	20u
		F0025	PF-DLCET08-F0025	20u
		F0040	PF-DLCET08-F0040	20u
puriFlash® Dry-Load	C18 STD 80 %	F0004	PF-DLIRC1808-F0004	5u
		F0012	PF-DLIRC1808-F0012	5u
		F0025	PF-DLIRC1808-F0025	5u
		F0040	PF-DLIRC1808-F0040	5u
puriFlash® Dry-Load	C18 STD 50 %	F0004	PF-DLIRC1805-F0004	5u
		F0012	PF-DLIRC1805-F0012	5u
		F0025	PF-DLIRC1805-F0025	5u
		F0040	PF-DLIRC1805-F0040	5u

### High-Pressure Dry-Load

Nature	Type	Format	P/N	Qty
puriFlash® HP Dry-Load	Empty	50 x 21.2mm	OA0320	1u
		75 x 21.2mm	OA0330	1u
		100 x 21.2mm	7A1870	1u
		50 x 30mm	OA0340	1u
		75 x 30mm	OA0350	1u
		100 x 30mm	7A1880	1u
puriFlash® Dry-Load - Tightening tool				
Spanner wrench for 21.2mm ID			7A1590	1u
Spanner wrench for 30mm ID			7A1610	1u
Replacement frit				
Replacement frit for 21.2mm ID			0A2100	1u
Replacement frit for 30mm ID			0A2110	1u



# HOW TO REQUEST MORE INFORMATION, A QUOTATION OR TO PLACE AN ORDER

Please see from the list below:



## HOW TO PLACE AN ORDER

Europe, Israël: [orders.EU@advion-interchim.com](mailto:orders.EU@advion-interchim.com) - Phone: +33 4 70 03 88 55  
North America: [orders.NAM@advion-interchim.com](mailto:orders.NAM@advion-interchim.com) - Phone: +1 607 266 9162  
Asia Pacific: [orders.APAC@advion-interchim.com](mailto:orders.APAC@advion-interchim.com) - Phone: +46 703108410  
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Asia Pacific: [quotes.APAC@advion-interchim.com](mailto:quotes.APAC@advion-interchim.com)  
South America: [quotes.SAmerica@advion-interchim.com](mailto:quotes.SAmerica@advion-interchim.com)

## NEED TECHNICAL ASSISTANCE?

Our scientific experts are here to help.  
Instrumentation: [instrumentation@advion-interchim.com](mailto:instrumentation@advion-interchim.com)  
Consumable: [consumables@advion-interchim.com](mailto:consumables@advion-interchim.com)

## NEED A GENERAL INFORMATION?

Europe, Israël: [info.EU@advion-interchim.com](mailto:info.EU@advion-interchim.com)  
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Asia Pacific: [info.APAC@advion-interchim.com](mailto:info.APAC@advion-interchim.com)  
South America: [info.SAmerica@advion-interchim.com](mailto:info.SAmerica@advion-interchim.com)

## Online

[www.advion-interchim.com](http://www.advion-interchim.com)

**All your orders will be recorded & processed as quickly as possible.**

## Live Demo

Our team will be pleased to give you a live demonstration of our products.  
Let's arrange a personal appointment!



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