

# 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®**, a well known player in the world of mass spectrometry and chromatography products, and **Interchim®**, 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®** and **Advion®** 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

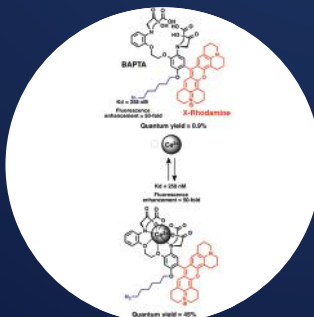
Flash and prep columns  
for purification



**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

## LC PURIFICATION

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# SUMMARY

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|                                   |               |
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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 - 15 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

300  
mL/minup to  
F080020  
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.

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



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

Unit Control  
15" touch screen  
Remote Control  
USB x4 - RJ45

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

Easy to Maintain  
Built to last

Column i.d. up to  
=> 90mm

Small footprint

Integrated flash column holder

Solvent tray w/drainage system  
Injection  
Liquid or Dry-Load injection  
w/column equilibration.

Load & Go:  
an automated  
4 port electric valve  
manages solid injection

Quaternary Gradient Pump  
Air purge

PF-XS 520 Plus +  
pack\_Ultra

Detection  
PF-XS 520 Plus => UV: 200-400nm  
(Multi wavelength & Scan collection  
Spectral view & Purity confirmation)  
Flow Cell: 0.3mm/40µL

=> UV: 200-800nm



# 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.

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-column holder

\* Quaternary Gradient Pump  
Air purge

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  
4 port electric valve  
manages solid injection

Modular & Easy to Maintain  
Built to last

Column i.d. up to  
=> 90mm

Safety:  
Leak detection  
Solvent & waste level monitoring

Integrated  
flash column holder

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



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

250  
mL/minup 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.

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



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

Flash  
& GoLoad  
& GoBoost  
& Go

[\*Supplied without injection valve and door]

P/N : PFG5C0



# LC PURIFICATION

## Purification Flash characteristics

|                                                     | Flash Purification<br>XS 520 Plus                      |             |        | Flash Purification<br>5.020                               | Flash Purification<br>5.050                               |
|-----------------------------------------------------|--------------------------------------------------------|-------------|--------|-----------------------------------------------------------|-----------------------------------------------------------|
| Pump                                                |                                                        |             |        |                                                           |                                                           |
| 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                                                        |
| Detector                                            |                                                        |             |        |                                                           |                                                           |
| UV: 200 - 400 nm multi wavelength & scan collection | *Plus                                                  | _UVextended | _Ultra |                                                           |                                                           |
|                                                     | 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                                                |
| Injection                                           |                                                        |             |        |                                                           |                                                           |
|                                                     | *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                                                       |
| Column Selection valve                              |                                                        |             |        |                                                           |                                                           |
| 6 port electrical valve                             | no                                                     |             |        | no                                                        | no                                                        |
| System Optimization                                 |                                                        |             |        |                                                           |                                                           |
| Tubing - after pump                                 | 1/8" x 1.6 mm id                                       |             |        | 1/8" x 1.6 mm id                                          | 1/8"x1.6 mm id                                            |
| Flow cell: optical length / Volume                  | 0.3 mm/40 µL                                           |             |        | 0.3 mm/40 µL                                              | 0.3 mm/40 µL                                              |
| Column Holder                                       |                                                        |             |        |                                                           |                                                           |
| Integrated                                          | yes                                                    |             |        | yes                                                       | yes                                                       |
| Pre-column holder                                   | no                                                     |             |        | yes                                                       | yes                                                       |
| Fraction Collector                                  |                                                        |             |        |                                                           |                                                           |
| Regular Collector                                   | 2 long racks<br>112 tubes 18 x 150 mm                  |             |        | 3 racks Gen5<br>132 tubes 18 x 150 mm                     | 3 racks Gen5<br>132 tubes 18 x 150 mm                     |
| Unit control                                        |                                                        |             |        |                                                           |                                                           |
| Touch screen 15"                                    | yes                                                    |             |        | yes                                                       | yes                                                       |
| USB                                                 | 6                                                      |             |        | 8                                                         | 8                                                         |
| RJ45                                                | yes                                                    |             |        | yes                                                       | yes                                                       |
| Software                                            |                                                        |             |        |                                                           |                                                           |
| Intersoft® X                                        | yes                                                    |             |        | yes                                                       | yes                                                       |
| Safety                                              |                                                        |             |        |                                                           |                                                           |
| 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                                                       |
| Size                                                |                                                        |             |        |                                                           |                                                           |
|                                                     | W: 14" - 35.5 cm<br>D: 18.5" - 47 cm<br>H: 30" - 77 cm |             |        | W: 15.75" - 40 cm<br>D: 20.0" - 51 cm<br>H: 29.5" - 75 cm | W: 15.75" - 40 cm<br>D: 20.0" - 51 cm<br>H: 29.5" - 75 cm |

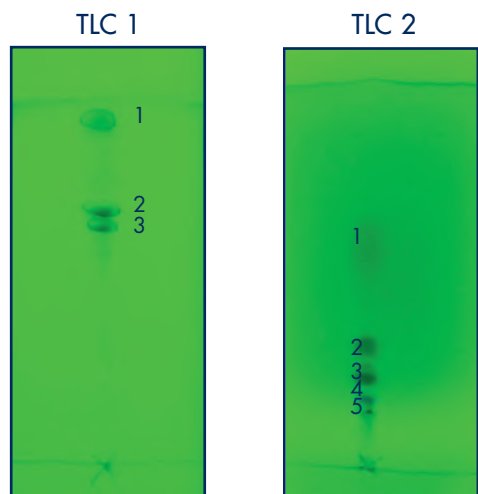


## Genius Makes Easy & Secured Purifications

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 |

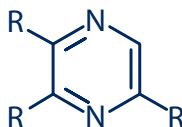
$\Delta CV_{3,2} = 0.09$

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)

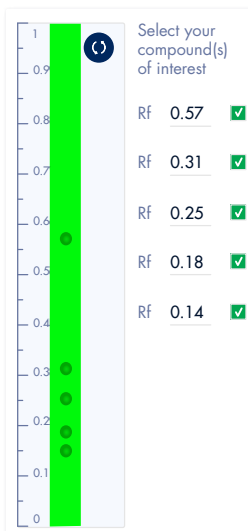
↑ UPLOAD

↺ RESET

Crude sample 100 mg

Solvent 1 Toluene 90 % Additive ☐

Solvent 2 Methanol 10 % Additive ☐



#### SELECT A COLUMN

| Column          | Stock                               |
|-----------------|-------------------------------------|
| PF-30SIHP-F0012 | <input type="checkbox"/>            |
| PF-15SIHP-F0012 | <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 PF-DLE-F0004

GO TO MANUAL METHOD

GO TO RUN

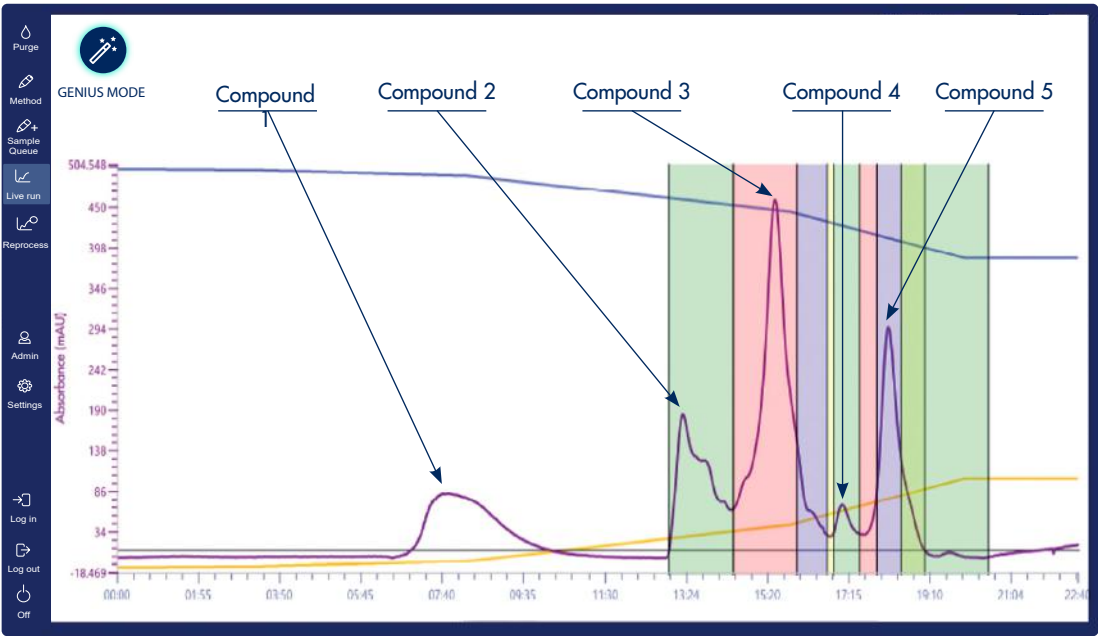
### 3. Flash conditions

Device: puriFlash® 5.020  
Solvents: A: Toluene  
B: Methanol  
Column: PF-1.5SIHP-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.

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

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

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

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

Integrated flash & prep  
column holder  
Pack\_Multi:  
column selection valve

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



Flash  
& Go



Load  
& Go



Boost  
& Go

[\* Supplied without injection valve and door]

P/N : PFG5E0

## Ultra High Performance Purification - puriFlash® 5.400-UV

puriFlash® 5.400-UV

125  
mL/minup 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.

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



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

\*Quaternary Gradient Pump  
Washing discs

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 + 10 port electric valves  
manage liquid 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: 1.0mm/20µl

Integrated prep column holder

Flash  
& GoLoad  
& GoBoost  
& Go

[\*Supplied without injection valve and door]

P/N : PFG5F0



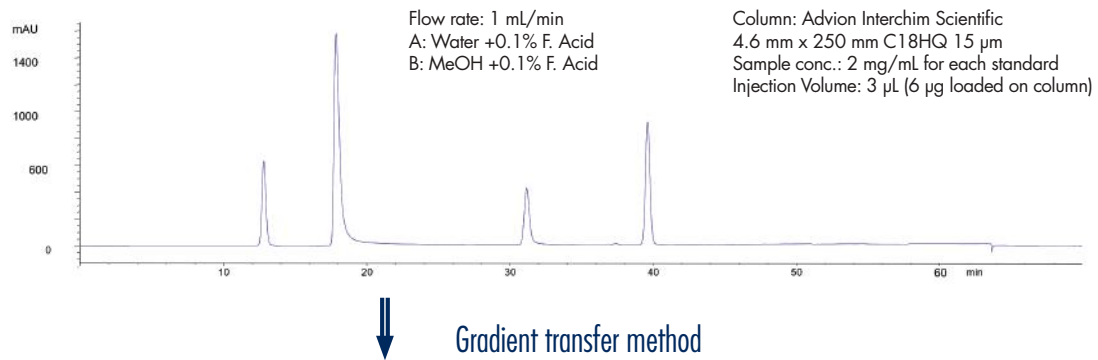
## LC PURIFICATION

### Purification Prep Ultra-prep characteristics

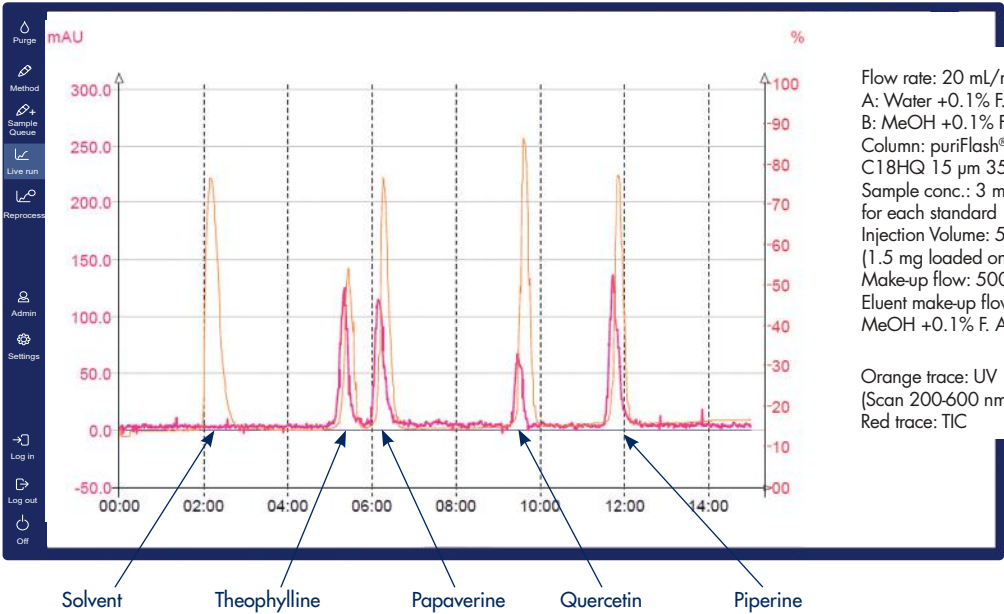
|                                                     | Preparative<br>5.250                                      | Ultra-Prep<br>5.400-UV                                    |
|-----------------------------------------------------|-----------------------------------------------------------|-----------------------------------------------------------|
| <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<br>132 tubes 18 x 150 mm                     | 3 racks Gen5<br>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<br>D: 20.0" - 51 cm<br>H: 29.5" - 75 cm | W: 15.75" - 40 cm<br>D: 20.0" - 51 cm<br>H: 29.5" - 75 cm |

Application note: HPLC to prep

HPLC analysis using standard gradient method



UPFP-APCI/MS



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                        | 40               | 40 |  |
| 30.0 min                       | 25               | 75 |  |
| 40.0 min                       | 25               | 75 |  |

Method transfered

|                           |              |    |    |
|---------------------------|--------------|----|----|
| Dwell volume system       | PF-5.250     |    |    |
| Column transferred        |              |    |    |
| 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     |    |    |
| Estimated resolution (Rs) | 2,90         |    |    |
| Estimated pressure        | 130 Bar      |    |    |
| Table transferred         |              |    |    |
| Time                      | Time (h:m:s) | A% | B% |
| 0,0 min                   | 00:00:00     | 60 | 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 |



**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



**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



Flash  
& Go



Load  
& Go



Boost  
& Go

[\* Supplied without injection valve and door]

P/N: PFG5Q0

## Purification Peptides &amp; Oligonucleotides characteristics

|                                                     | Peptides & Oligonucleotides<br>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<br>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<br>D: 20.0" - 51 cm<br>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:

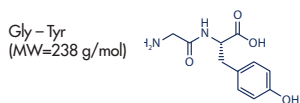
Test 1: Isopropanol

Test 2: Solution of Propionic Acid

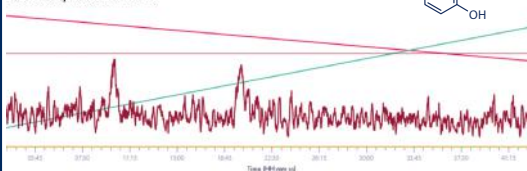
in Isopropanol (25/75) (TFA-Fix)

Elution conditions:

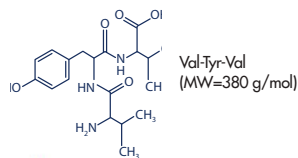
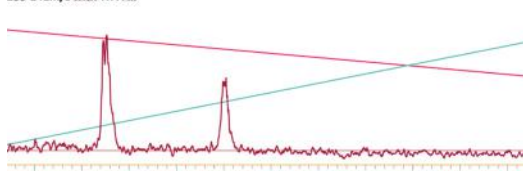
| t (min) | A (%) | B (%) |
|---------|-------|-------|
| 00:00   | 95    | 5     |
| 45:00   | 60    | 40    |



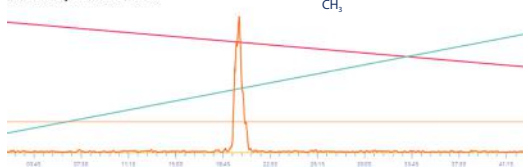
235-241m/z without TFA Fix



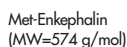
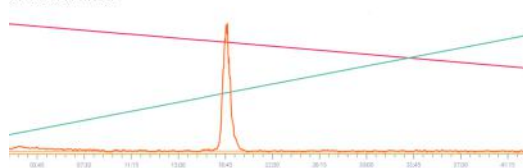
235-241m/z with TFA Fix



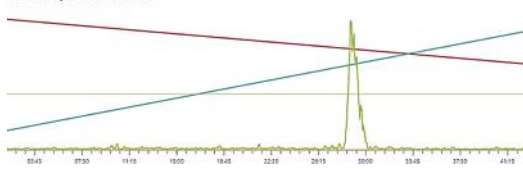
377-383m/z without TFA Fix



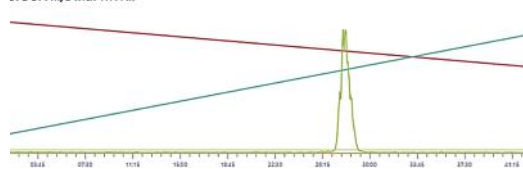
377-383 with TFA Fix



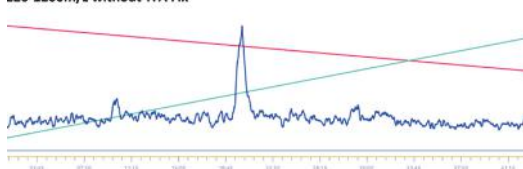
571-577m/z without TFA Fix



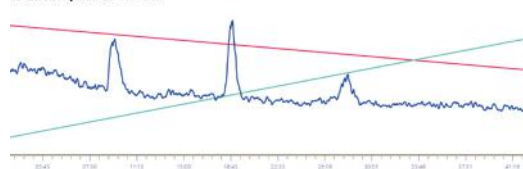
571-577m/z with TFA Fix



220-1200m/z without TFA Fix



220-1200m/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



**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.

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



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

Unit Control  
15" touch screen  
Remote Control  
USB x4 - RJ45

Solvent tray w/drainage system

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**



**825**  
mL/min

up to  
150mm i.d.  
Col.

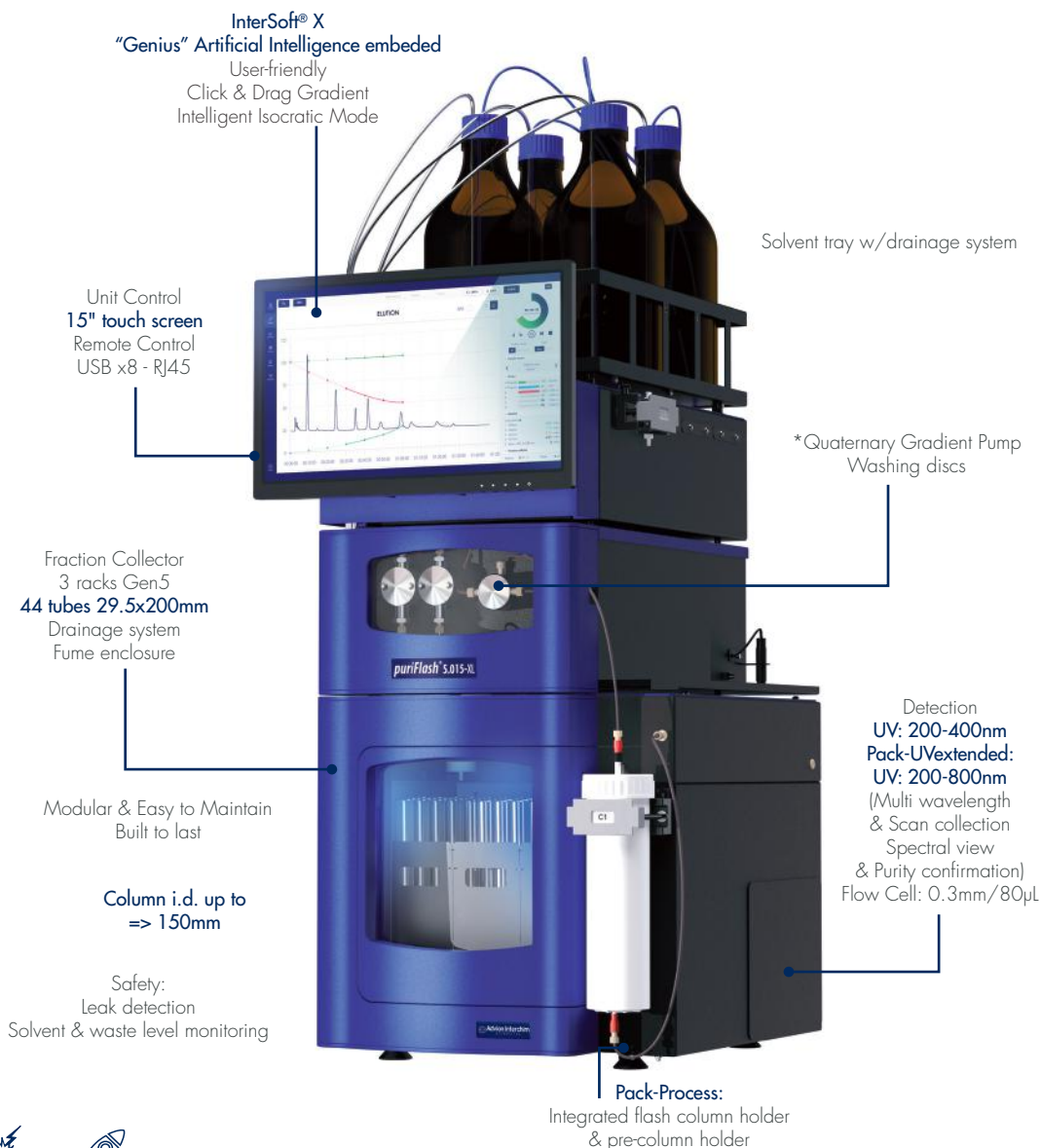
**15**  
bar

## 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.

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



[\* Supplied without injection valve and door]

P/N : PFG5L0

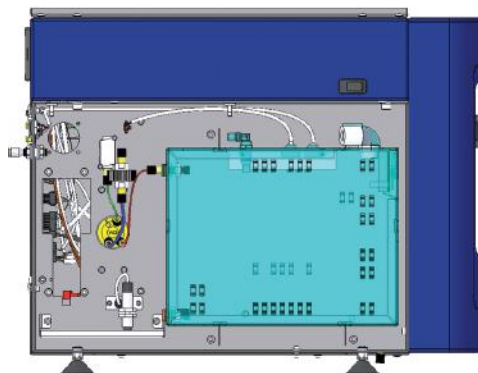
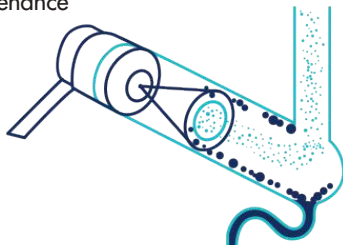
|                                                     | Flash Purification Process<br>535-XL                   | Flash Purification Process<br>5.015-XL                    |
|-----------------------------------------------------|--------------------------------------------------------|-----------------------------------------------------------|
| <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<br>112 tubes 18 x 150 mm                  | 3 racks Gen5<br>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<br>D: 18.5" - 47 cm<br>H: 30" - 77 cm | W: 15.75" - 40 cm<br>D: 20.0" - 51 cm<br>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

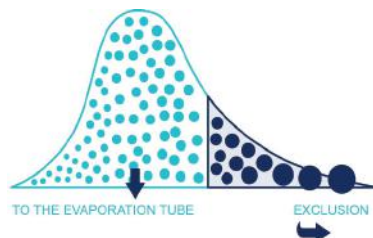


Optimized **Low Temperature** Technology.  
**Quicker droplets drying** at lower temperature.  
 Preserves the integrity of thermo-sensitive compounds.

### Low Temperature Technology:

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

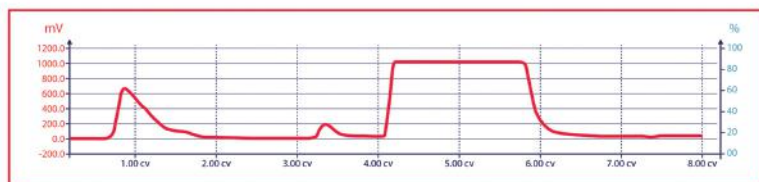
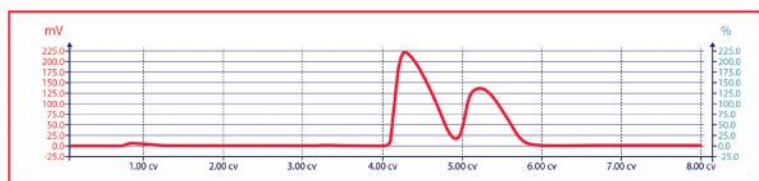
With this patented nebulizer technology, the droplets dry faster at low temperatures, providing appropriate signal intensities for semi-volatile compounds. This technology requires no additional peripherals, such as a nebulizer with heating system (spray chamber) or an evaporation tube (Peltier cooling)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



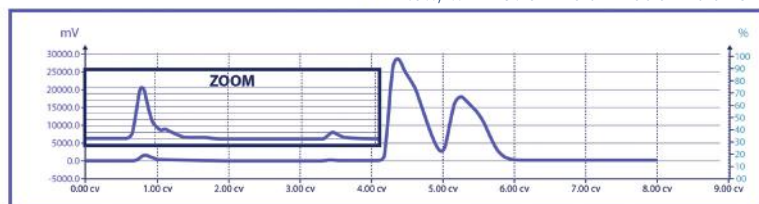
### Dynamic Gain SAGA:

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 µL/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)



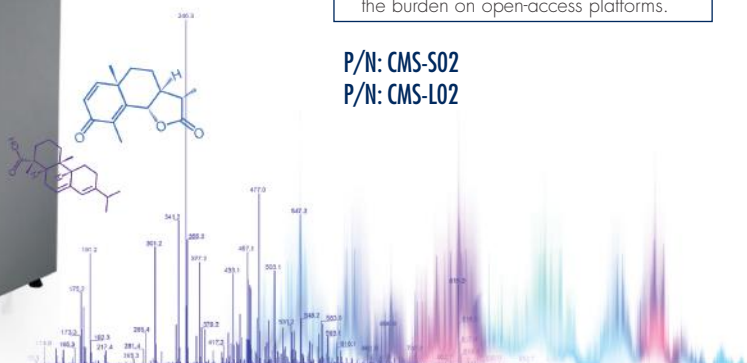
Compact Single Quad - APCI

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>

expression<sup>L</sup>

|                                                                                 | puriFlash® MS<br>for small molecules, synthetic organic chemists.<br>Upgraded specs for pos/neg switching, faster<br>scanning & higher flow rate | puriFlash® MS-HMW<br>for large molecules - peptide synthesis,<br>polymer chemistry & natural products |
|---------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|
| Sources                                                                         | APCI - APCI/ASAP - ESI                                                                                                                           | APCI - APCI/ASAP - ESI                                                                                |
| Patented API                                                                    | Orthogonal ion sampling from heated capillary<br>allows for small single turbo pump.                                                             | Orthogonal ion sampling from heated<br>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<br>Reserpine, FIA 5 µL injection<br>at 100 µL/min) | 100:1                                                                                                                                            | 100:1                                                                                                 |
| Accuracy (m/z)                                                                  | 0.1                                                                                                                                              | 0.1                                                                                                   |
| Stability (m/z-units per 24 hour<br>period: 18 - 24°C)                          | 0.1                                                                                                                                              | 0.1                                                                                                   |

# COMPACT MASS SPECTROMETRY

The expression CMS family of compact mass spectrometers

expression<sub>CMS</sub>

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.



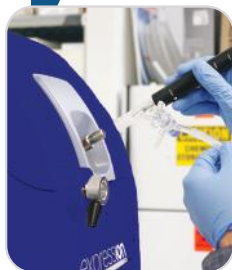
ASAP<sup>®</sup>: Atmospheric Solids Analysis Probe



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)



vAPCI: Volatile APCI for Gas Analysis

High performance compact mass spec designed especially for chemists



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™

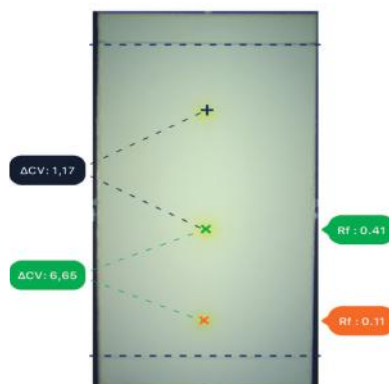
The TLC-FlashReader is an ultra-compact and robust TLC plate reader with a camera and 3 different lamps: white light, 254 nm & 366 nm. It satisfies users working in Research, Development, Quality Control and Process. It is a multifunctional device that allows you to :

- 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: BKZYO0



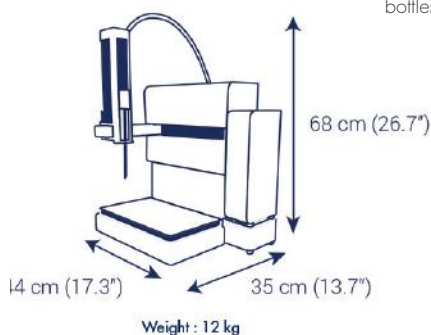
# LC PURIFICATION

## puriFlash® AS-1

### 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.



| 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

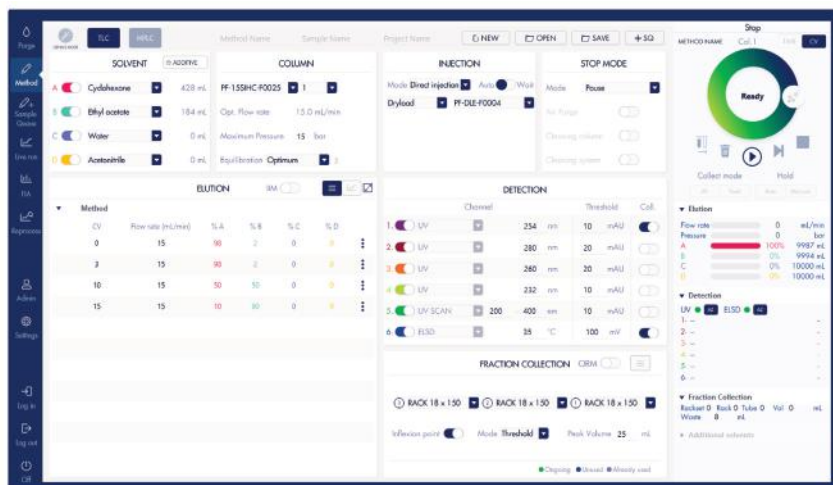
No need to inject your sample in several times on the column, the injection pump takes care of everything.

### Feature:

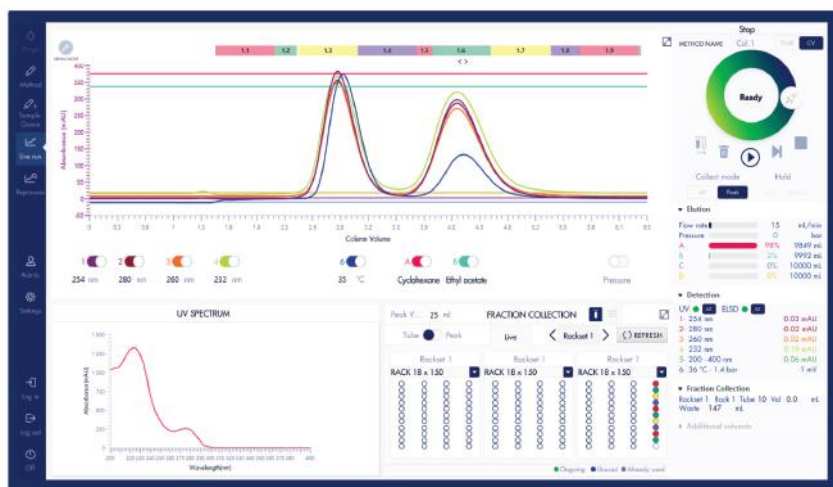
- Automation of large volume injection
- Precision and repeatability of the injected quantity
- Dedicated to high volume injections
- Flow rate range 1-250 mL/min
- Max pressure 125 bar
- Specially designed for high volume injection, mainly used with F0800, F1600, F3000, F5000 and F10K columns.



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.

## LC PURIFICATION

### Smartphone App.



#### "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.

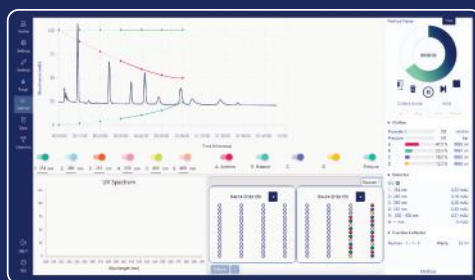
FR 3079932A1

(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<br>520Plus | PF-<br>535-XL | PF-<br>5.020 | PF-<br>5.050 | PF-<br>5.015-XL | PF-<br>5.250 | PF-<br>5.250P | PF-<br>5.400-UV |
|---------------------------|----------------------------------------------------------------------|-------|------------------|---------------|--------------|--------------|-----------------|--------------|---------------|-----------------|
| <b>Detector</b>           |                                                                      |       |                  |               |              |              |                 |              |               |                 |
| FJ6720                    | Manometer ELSD                                                       | 1     | U                |               |              | x            | x               |              | x             | x               |
| B4VBK0                    | 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>             |                                                                      |       |                  |               |              |              |                 |              |               |                 |
| BYNXZ0                    | 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             |                 |
| BX5KP0                    | 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             |                 |
| BWIS00                    | 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             |                 |
| LY8210                    | Stand alone for Prep configuration + kit                             | 1     | u                |               |              | x            |                 | 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<br>520Plus | PF-<br>535-XL | PF-<br>5.020 | PF-<br>5.050 | PF-<br>5.015-XL | PF-<br>5.250 | PF-<br>5.250P | PF-<br>5.400-UV |
|---------------------------|---------------------------------------------------------------------------------------|-------|------------------|---------------|--------------|--------------|-----------------|--------------|---------------|-----------------|
| B1SUJ0                    | Safety waste cap with container 5L + filter (for PF-Gen5)                             | 1 u   |                  |               | x            | x            |                 | x            | x             | x               |
| B1SUJ0                    | 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                |               |              |              |                 |              |               |                 |
| I06930                    | 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               |
| PFAJE0                    | 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               |              |               |                 |
| B4VBPI                    | 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               |
| I02360                    | 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             |                 |
| B2ZJ10                    | 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   |                  |               |              |              |                 |              |               |                 |
| BOE350                    | 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-<br>XS520+ | PF- XS520<br>ULTRA | PF- 535XL | PF-<br>5020 | PF-<br>5050 | PF-<br>5250 | PF-<br>5015XL | PF- 5250P | PF- 5400-<br>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         |                 |
|         | J08520 | 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         |             |             |             |               |           |                 |
|                                                            | PFALG0 | 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         |                 |
|                                                                       | H02560 | 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-<br>XS520+ | PF- XS520<br>ULTRA | PF- 535XL | PF-<br>5020 | PF-<br>5050 | PF-<br>5250 | PF-<br>5015XL | PF- 5250P | PF- 5400-<br>UV |
|-------------------------------------------------------------------------------------|--------|-------|-----|-----------------------------------------------------------------------------|---------------|--------------------|-----------|-------------|-------------|-------------|---------------|-----------|-----------------|
|    | 7A1762 | 1.5 m | 4   | PTFE Tubing ESD Black<br>3.18 x 4.76 mm                                     |               |                    | x         |             |             |             |               |           |                 |
|    | L04703 | 5 m   | 1   | ETFE Blue Tubing 1/8"<br>OD - 1.6 mm ID                                     |               |                    |           | x           | x           | x           | x             | x         | x               |
|    | L04690 | 1.5 m | 1   | ETFE Extruded Special Metric<br>2.4 mm ID 3.175 mm OD Blue<br>Dark Opaque   |               |                    |           | x           | x           | x           | x             | x         | x               |
|    | AS2W32 | 1.5 m | 1   | ETFE Extruded Special Metric<br>2.4 mm ID 3.175 mm OD Red<br>Opaque         |               |                    |           | x           | x           | x           | x             | x         | x               |
|    | AS2W42 | 1.5 m | 1   | ETFE Extruded Special Metric<br>2.4 mm ID 3.175 mm OD Green<br>Opaque       |               |                    |           | x           | x           | x           | x             | x         | x               |
|    | AS2W52 | 1.5 m | 1   | ETFE Extruded Special Metric 2.4<br>mm ID 3.175 mm OD Yellow<br>Opaque      |               |                    |           | x           | x           | x           | x             | x         | x               |
|    | AXEM01 | 1.5 m | 1   | ETFE Extruded Special Metric 1.6<br>mm Mm 3.175 mm Translucent<br>Red       |               |                    |           | x           | x           | x           | x             | x         | x               |
|    | AXEMP1 | 1.5 m | 1   | ETFE Extruded Special Metric 1.6<br>mm Mm 3.175 mm Translucent<br>Green     |               |                    |           | x           | x           | x           | x             | x         | x               |
|    | AXEMQ1 | 1.5 m | 1   | ETFE Extruded Special Metric 1.6<br>mm Mm 3.175 mm Translucent<br>Yellow    |               |                    |           | x           | x           | x           | x             | x         | x               |
|    | AS2IG1 | 1.5 m | 1   | ETFE Extruded Special Metric 1.6<br>mm Mm 3.175 mm Translucent<br>Dark Blue |               |                    |           | x           | x           | x           | x             | x         | x               |
|  | U86654 | 1.5 m | 1   | SE-Tubing ETFE 1/8" OD - 1.6<br>mm                                          |               |                    |           | x           | x           | x           | x             | x         | x               |
|  | 803770 | 3 m   | 1   | PEEK Tubing 1/8" OD -<br>1.6 mm ID                                          |               |                    |           |             |             | x           |               |           |                 |
|  | 767140 | 3 m   | 1   | Tube PEEK 1/16"<br>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<br>0.75 mm (0.030")                                       |               |                    |           |             |             |             |               |           | x               |
|  | 767130 | 3 m   | 1   | Tube PEEK 1/16" x 0.50 mm<br>(0.020")                                       |               |                    |           |             |             |             |               |           | x               |
|  | 177893 | 3 m   | 1   | Tube INOX 1/16" x<br>0.75 mm (0.030")                                       |               |                    |           |             |             |             |               |           | x               |
|  | 186243 | 3 m   | 1   | Tube INOX 1/16" x<br>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 1 L/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

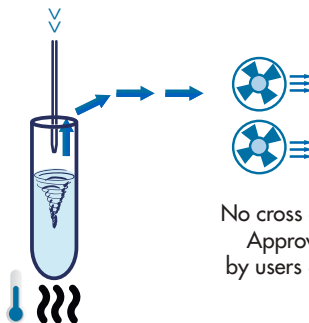
## Operating

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

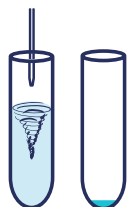


## User feedback

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<br>Bath Temp.: 35°C        | After 30min<br>Remain 5 mL in tube | 29 min<br>Complete dry                      | ✓30 minutes<br>Complete dry |
| Acetonitrile<br>Bath Temp.: 35°C    | After 45min<br>Remain 5 mL in tube | 40 min<br>Complete dry                      | ✓45 min<br>Complete dry     |
| ACN/Water 80/20<br>Bath Temp.: 45°C | 4h<br>Complete dry                 | ACN/Water 70/30<br>1h10 min<br>Complete dry | ✓1h30<br>Complete Dry       |

## Low gas consumption



Gas flowrate <1L/min per position (nitrogen)

Number sample evaporated : 56

Gas Pressure regulated: 1 bar

Total Gas Consumption: 40L/min -> 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  
-> 17min\*

Acetonitrile  
-> 30min\*

Hexane  
-> 9min\*

Ethanol  
-> 40min\*\*

Methanol  
-> 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<br>P/N : EVAA20 | Nozzles<br>P/N : EVAA50 | Adapter<br>P/N : EVAA10 | Racks |
|-------------------------------|-------------------------|-------------------------|-------|
|                               |                         |                         |       |

For 250mL glassware

| Manifold head<br>P/N : EVAA40 | Glassware<br>P/N : B684D0 or BVLGH0 | Racks<br>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 Exp51 6mL without RIM - round bottom - 0,5-0,6mm     | 4x250     |
| B69U00             | Test tubes 12,00x75mm borosilicate glass Exp33 6mL without RIM - round bottom - 0,9-1,0mm     | 100       |
| AXETO5             | Test tubes 13,00x100mm borosilicate glass Exp51 10mL without RIM - round bottom - 0,5-0,6mm   | 4x250     |
| B4G080             | Test tubes 13,00x100mm amber borosilicate glass Exp51 10mL without RIM - round bottom         | 4x250     |
| B69U60             | Test tubes 14,00x130mm borosilicate glass Exp33 16mL without RIM - round bottom - 0,8-0,9mm   | 100       |
| B6AW80             | Test tubes 15,00x85mm borosilicate glass Exp51 11mL without RIM - round bottom - 0,5-0,6mm    | 4x250     |
| AXETP5             | Test tubes 16,00x100mm borosilicate glass Exp51 15mL without RIM - round bottom - 0,5-0,6mm   | 4x250     |
| B4VVT0             | Test tubes 16,00x100mm borosilicate glass Exp33 15mL without RIM - round bottom - 1,1-1,2mm   | 100       |
| AXETR5             | Test tubes 16,00x125mm borosilicate glass Exp51 19mL without RIM - round bottom - 0,5-0,6mm   | 4x250     |
| B69U80             | Test tubes 16,00x130mm borosilicate glass Exp33 20mL without RIM - round bottom - 1,1-1,2mm   | 100       |
| AXETS5             | Test tubes 16,00x150mm borosilicate glass Exp51 23mL without RIM - round bottom - 0,5 - 0,6mm | 4x250     |
| AXETT5             | Test tubes 18,00x150mm borosilicate glass Exp51 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

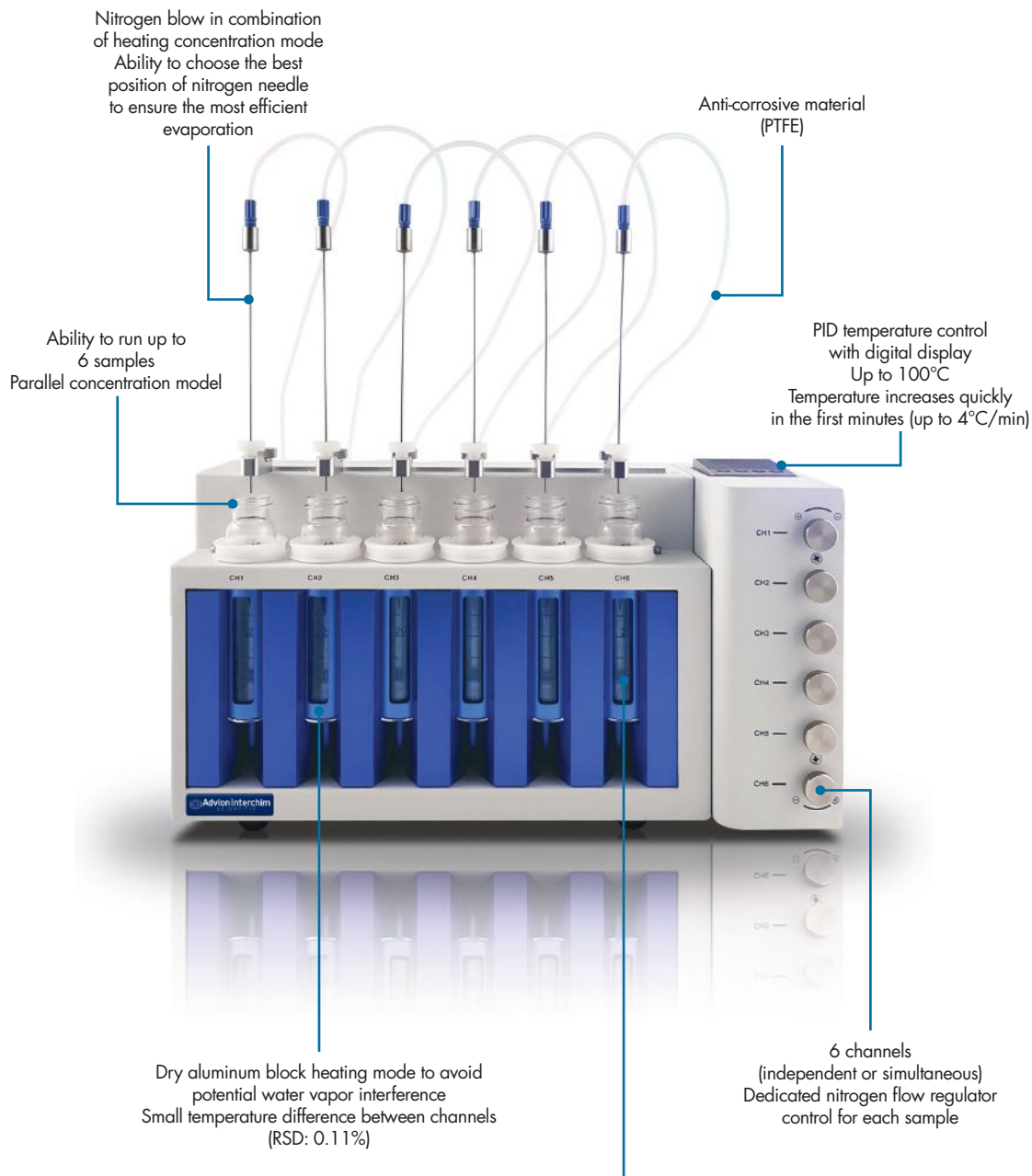
| Vial size              | Volume |
|------------------------|--------|
| 28 x 140 mm            | 60 mL  |
| 28 x 95 mm             | 40 mL  |
| 40 mL - 1 mL tail tube | 40 mL  |
| 18 x 150 mm            | 25 mL  |
| 16 x 150 mm            | 22 mL  |
| 16 x 100 mm            | 12 mL  |
| 13 x 100 mm            | 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™<br>AWZ5R0 | puriVap6™<br>Including:<br>1x gas tubing<br>6 x 40 mL vials<br>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™



## EVAPORATION

### Rotary Evaporator puriFlash® R-VAP

## 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.



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 |
|--------|----------------------------------------------------------------|

### 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 |
|------------|-----------------------------------------------------------------------------------------|

### 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



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



Direct Injection  
(FIA)



vAPCI: Volatile APCI for  
Gas Analysis



Flow Chemistry Monitoring  
& Automated, Real-Time,  
Optimization



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

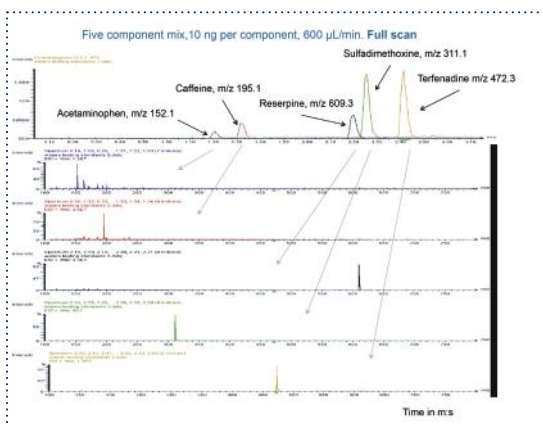
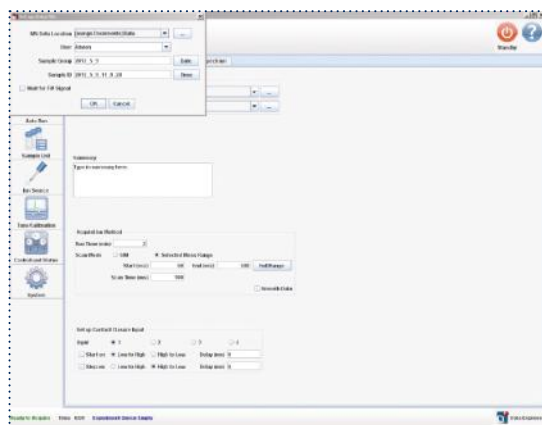


Touch Express<sup>™</sup> Open Port  
Sampling Interface (OPSI)

### 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 ( $m/z$ ):  $\text{expression}^{\circledR}$  S  $m/z$  1 200  
 $\text{expression}^{\circledR}$  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

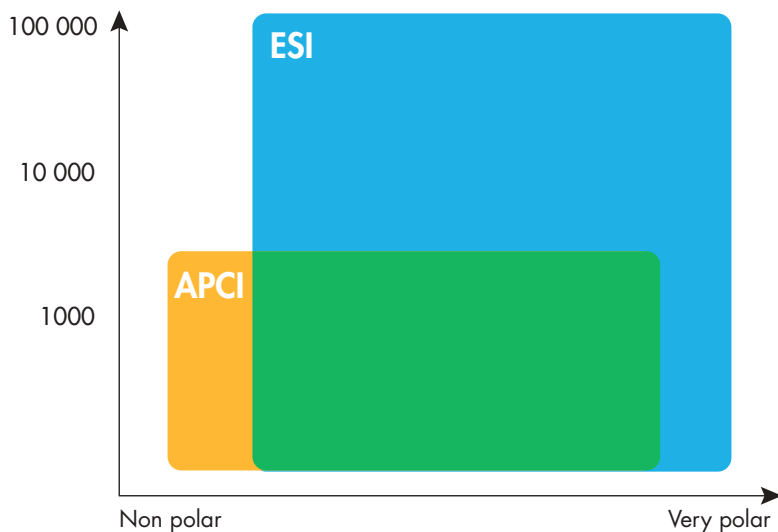
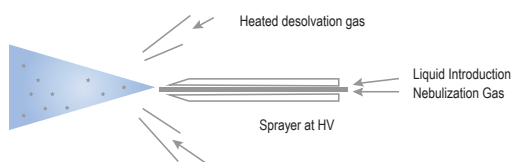
| Description                                      | P/N      | Qty |
|--------------------------------------------------|----------|-----|
| $\text{expression}^{\circledR}$ CMS-S $m/z$ 1200 | CMS-S-01 | 1 u |
| $\text{expression}^{\circledR}$ CMS-L $m/z$ 2000 | CMS-L-01 | 1 u |



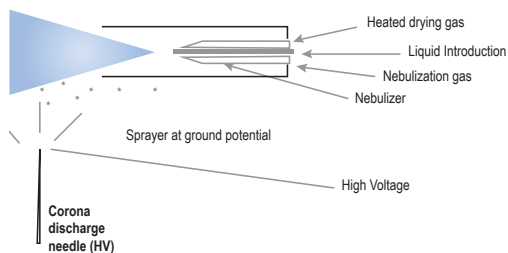
**Source**

Automatic source recognition

Quick and easy to change

Molecular Weight -  
Dalton Unit**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® CMS.

Advion Interchim Scientific® 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

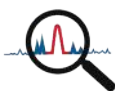
LC Express provides a seamless interface with the Advion Interchim Scientific AVANT™ (U) HPLC system, with additional capabilities to interface with nearly all LC systems on the market, including Agilent ICF and Data Apex Clarity drivers.



### 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.

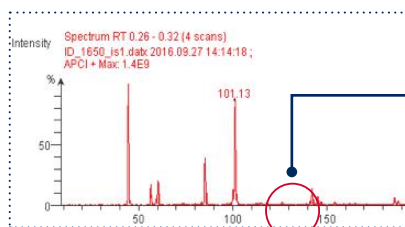
- Single click an instrument icon to set-up, and switch between, a range of sample introduction techniques
- Simplified interpretation of mass spectra with automatic identification of peaks related to your compound of interest
- Works alongside Mass Express for fully capable and versatile instrument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



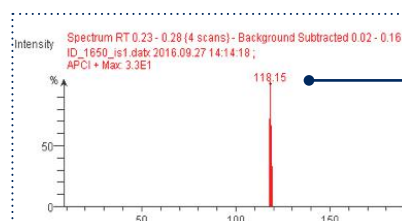
### Peak Express™: See more

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®** 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®** 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®: 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**® 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® (iASAP) is a modification of the ASAP® 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™ Open port sampling interface (OPSI)

The Touch Express™ 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**® 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



| Description                                                                                                | P/N          |
|------------------------------------------------------------------------------------------------------------|--------------|
| <b>expression® CMS</b>                                                                                     |              |
| expression <sup>S</sup> Compact Mass Spectrometer m/z 1200                                                 | CMS-S01      |
| expression <sup>L</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® source                                                                                        | IS-ASAP-S02  |
| iASAP source                                                                                               | IS-ISAP-S02  |
| ASAP®/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® 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® / 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®                                        | UP-ISAP-ASAP |
| Upgrade of existing standard ASAP® ion source to also include iASAP                                        | UP-ASAP-ISAP |
| <b>Plate Express™</b>                                                                                      |              |
| Plate Express™ CMS interface for analyzing TLC plates for 250 µm bed depths - (requires ACC374 and ACC361) | PE-001       |
| Isocratic pump, for direct injection, Plate Express™                                                       | ACC361       |
| Bracket for isocratic pump ACC361 if mounted underneath Plate Express™                                     | ACC364       |
| TLC interface accessory kit containing the required tubing, fittings, and cables                           | ACC374       |
| Replacement filter for Plate Express™ waste                                                                | ACC456       |
| Replacement head for Plate Express™ 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  $\mu$ L of sample volume.



- Chips are available in three different nozzle emitter sizes from 2.5  $\mu$ m ID to 5.5  $\mu$ m ID
- Internal chip void volume in the  $\mu$ L range allows for 15 min spray time from only 3  $\mu$ 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.

**TYPICAL APPLICATIONS**

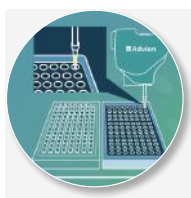
- Lipidomics, Metabolomics
- Top-down Protein Identification and Characterization
- QA/QC of Antibodies
- Non-covalent Interaction studies (NCI)
- Glycan Analysis

**Benefits**

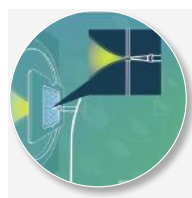
- Zero sample-to-sample carryover due to one tip, one sample, one nozzle workflow
- Stable nESI with long spray times from  $\mu$ L volume of samples
- High ionization efficiency, automated nano-electrospray
- High sample throughput from 96, 384 or 1536 well plates

**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
- Topdown/bottom-up Proteomics
- Protein PTM analysis

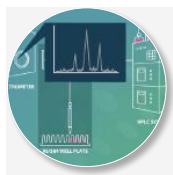
## LC/MS with Fraction Collection for re-analysis by Infusion

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.

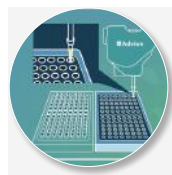
## Benefits

- 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

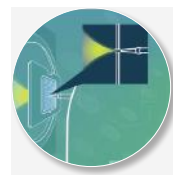
## 3 STEP LC/MS EXPERIMENT WITH FRACTION COLLECTION



**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.

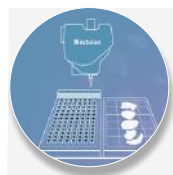
## Benefits

- 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 µL of solvent

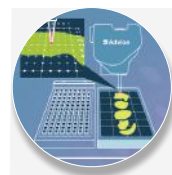
## TYPICAL APPLICATIONS

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

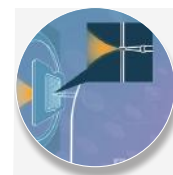
## 3 STEP LESA® EXPERIMENT



**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)**

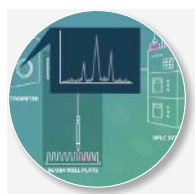
LESAplus LC experiments can be executed through the Developers Kit software extension and allows for the added benefit of separation. Spatial resolution can be improved to 400 µm on target and once the extract is placed in the loop of the on-board 6 port valve, an nLC/MS experiment can commence.

**Benefits**

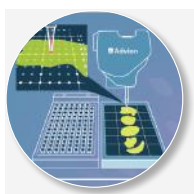
- Direct analysis from surface of interest
- 400 µm spatial resolution
- Liquid extraction and ESI based analysis
- High sensitivity due to added chromatographic separation
- Derivatization prior to LESAplus experiment
- Analysis of complex mixtures and isobaric compounds

**TYPICAL APPLICATIONS**

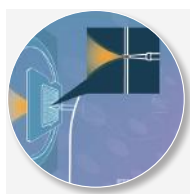
- Spatially resolved Lipidomics
- PK/PD analysis of small molecule drugs
- Peptidomics

**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-NMT-LESA      |
| LESA® enabled TriVersa NanoMate® with additional on-board Camera system and Developers Kit interface to run LESAplus experiments (LESA-LC).                                                                                 | TV-NMT-LESA-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.<br>(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.<br>(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          |



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.

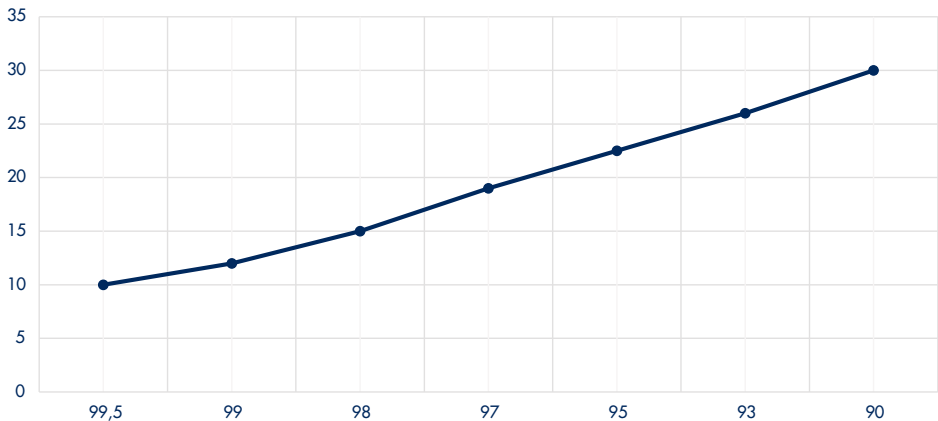
Thanks to its integrated air compressor, only a power supply is required for operation.

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 m/min

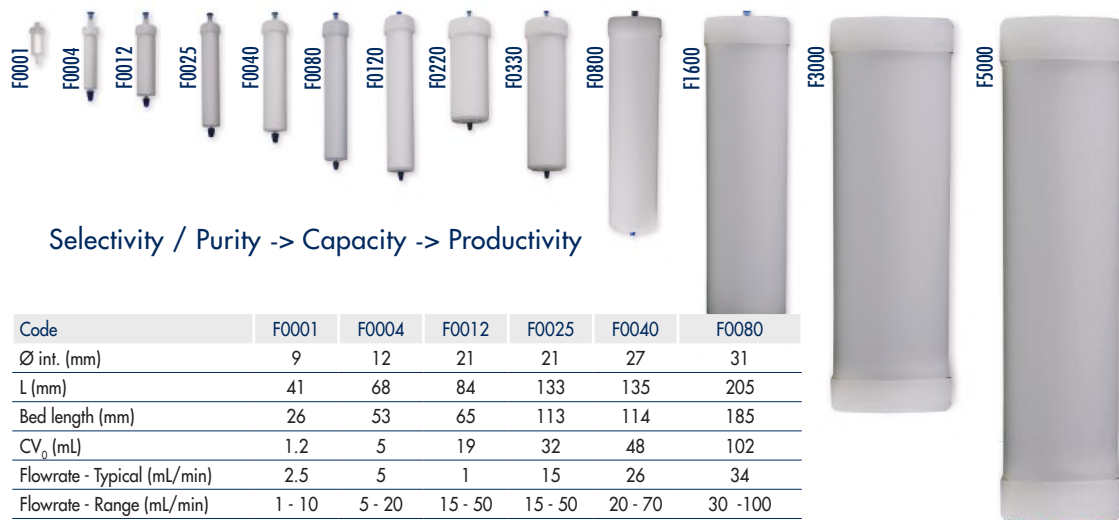
max. 20 bar

### 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.

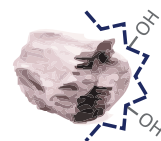
#### Sample dispersion

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® columns - Normal Phase

## 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

60 Å - 450 m<sup>2</sup>/g

20 &amp; 40/63 µm

pH stability: 1.5 to 6.5

Economical

## APPLICATION AREA

HPLC  
PrepLC  
Flash

Single use columns

General application:

Non-ionic &amp; polar organic molecules

## 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 |



## puriFlash® SI-HP

60 Å - 500 m<sup>2</sup>/g

5, 10, 15, 30 &amp; 50 µm

pH stability: 1.5 to 6.5

High efficiency

## APPLICATION AREA

HPLC  
PrepLC  
Flash

Single use columns

General application:

Non-ionic &amp; polar organic molecules

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 &lt;or= 2.0%





## 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 &amp; 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 &amp; 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

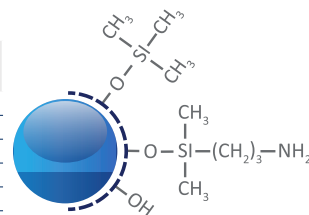
## puriFlash® NH2

| 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  |



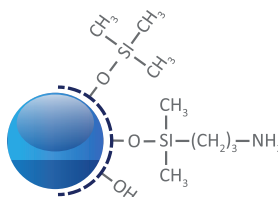
## puriFlash® NH2

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® NH2-  
HC

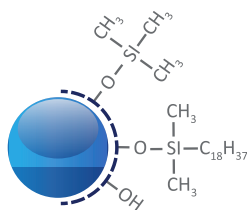
60 Å - 680 m<sup>2</sup>/g  
50 µm  
Amino  
% C: 4

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® 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.

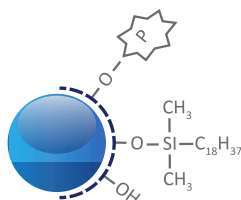
## APPLICATION AREA

HPLC ●  
PrepLC ●  
Flash ●

Reusable column

General application:

Medium and high apolar organic compounds



## puriFlash® C18-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

## 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

| 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  |

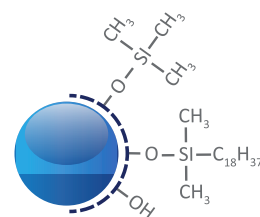
| Flash Columns | 15µm             | Qty | 30µm             | Qty |
|---------------|------------------|-----|------------------|-----|
| F0001         | SC-15C18AQ-F0001 | 25u | ---              | --- |
| F0004         | PF-15C18AQ-F0004 | 4u  | PF-30C18AQ-F0004 | 4u  |
| F0012         | PF-15C18AQ-F0012 | 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 &amp; 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

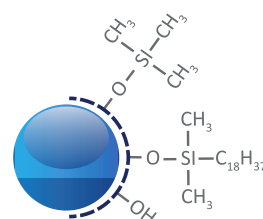
General application:

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

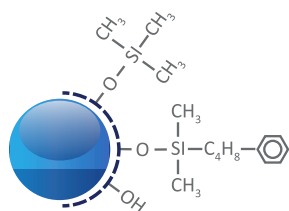
%C: 19

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

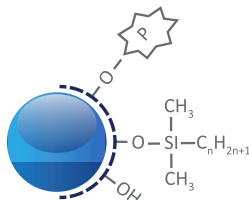
100 Å - 300 m<sup>2</sup>/g  
2.2, 3, 5, 10, 15 µm  
PH C4 Mono-functional  
%C: 12

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

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

#### APPLICATION AREA

HPLC  
PrepLC  
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

HPLC  
PrepLC  
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  |

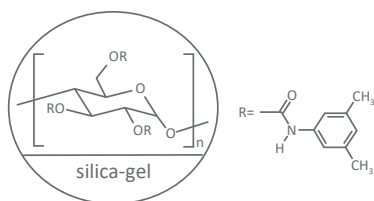
| LC Preparative Columns | 5 µm            | Qty | 10 µm            | Qty | 15 µm            | Qty |
|------------------------|-----------------|-----|------------------|-----|------------------|-----|
| 250 x 4.6 mm           | US5PHC4-250/P46 | 1 u | US10PHC4-250/P46 | 1 u | US15PHC4-250/P46 | 1 u |
| 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

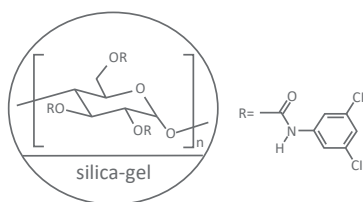
Chiral compounds in normal and reverse phase such  
 as Bupivacaine, Indapamide, suproferm...

### 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 ☐  
 PrepLC ☐  
 Flash ☒



### IC chiral

20 µm

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

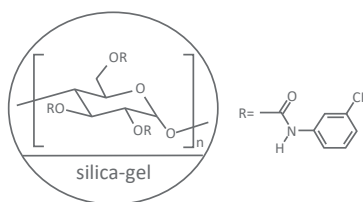
Chiral compounds in normal and inverse phase, such  
 as Econazole, Indoprofen, 5-Fluoro-1 (tetrahydro-2-  
 furyl) uracil, etc.

### 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 ☐  
 PrepLC ☐  
 Flash ☒



### ID chiral

20 µm

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

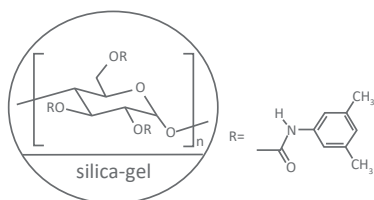
Chiral compounds in normal and reverse phase such  
 as (±)-Hydrobenzoin, Sulconazole,  
 Tropic acid...

### 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 ☐  
 PrepLC ☐  
 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

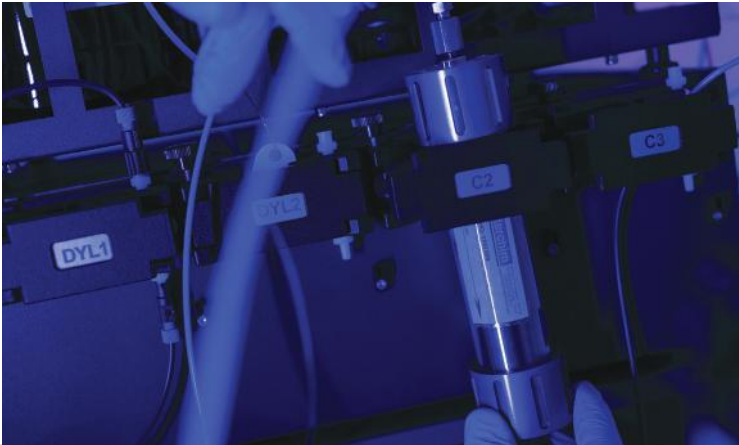
HPLC ☐  
 PrepLC ☐  
 Flash ☒

Selection Guide

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

In-Process QA/QC of Peptides Synthesis

puriFlash® BIO CS 2.6C18N => puriFlash® BIO 100 2.5C18N



## puriFlash® Bio columns - For peptides

## puriFlash® BIO 100 C18-N

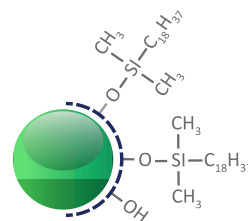
| Prep-LC columns | 5 µm             | Qty | 10 µm             | Qty | 15 µm             | Qty |
|-----------------|------------------|-----|-------------------|-----|-------------------|-----|
| 250 x 4.6 mm    | PFB5C18N-250/P46 | 1 u | PFB10C18N-250/P46 | 1 u | PFB15C18N-250/P46 | 1 u |
| 150 x 10.0 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

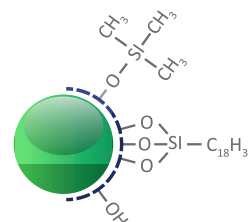
| Prep-LC columns | 5 µm             | Qty | 10 µm             | Qty | 15 µm             | Qty |
|-----------------|------------------|-----|-------------------|-----|-------------------|-----|
| 250 x 4.6 mm    | PFB5C18T-250/P46 | 1 u | PFB10C18T-250/P46 | 1 u | PFB15C18T-250/P46 | 1 u |
| 150 x 10.0 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

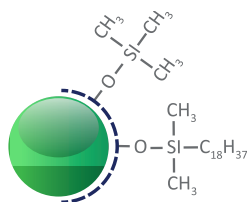
100 Å - 320 m<sup>2</sup>/g  
 2.5 ; 3.5 ; 5 ; 10 ; 15 & 30 µm  
 C18 - octadecyl  
 Mono-functional  
 %C: 15.0  
 End-capping: None  
 pH stability: 1.5 to 8.0  
 Use mode: Reverse  
*In-Process QA/QC of Peptides  
 Synthesis, Analysis & Purification  
 of polar Peptides with less than  
 40AA & mw.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

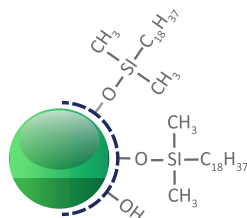




## puriFlash® BIO C18-XS

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

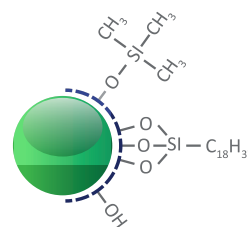
| Prep-LC columns | 5 µm            | Qty | 10 µm            | Qty | 15 µm            | Qty |
|-----------------|-----------------|-----|------------------|-----|------------------|-----|
| 250 x 4.6 mm    | PT5C18T-250/P46 | 1 u | PT10C18T-250/P46 | 1 u | PT15C18T-250/P46 | 1 u |
| 150 x 10.0 mm   | 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

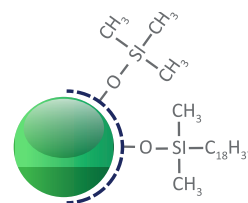
200 Å - 200 m<sup>2</sup>/g  
2.5 ; 3.5 ; 5 ; 10, 15 & 30 µm  
C18 - octadecyl  
Tri-functional  
%C: 10.0

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

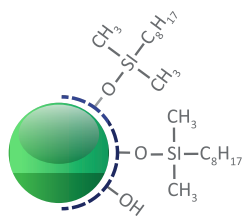
200 Å - 200 m<sup>2</sup>/g  
2.5 ; 3.5 ; 5 ; 10, 15 & 30 µm  
C18 - octadecyl  
Mono-functional  
%C: 8.0

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



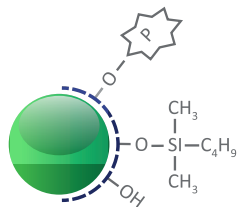
## puriFlash® BIO C8-N

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

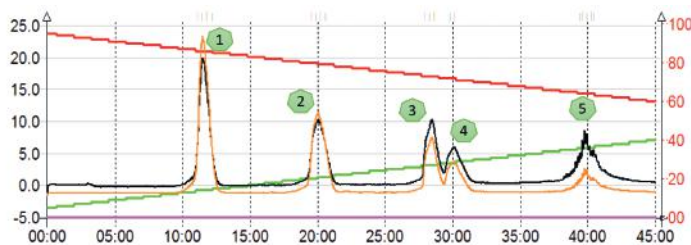
| Prep-LC columns | 5 µm            | Qty | 10 µm            | Qty | 15 µm            | Qty |
|-----------------|-----------------|-----|------------------|-----|------------------|-----|
| 250 x 4.6 mm    | PP5C4AQ-250/P46 | 1 u | PP10C4AQ-250/P46 | 1 u | PP15C4AQ-250/P46 | 1 u |
| 150 x 10.0 mm   | 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)

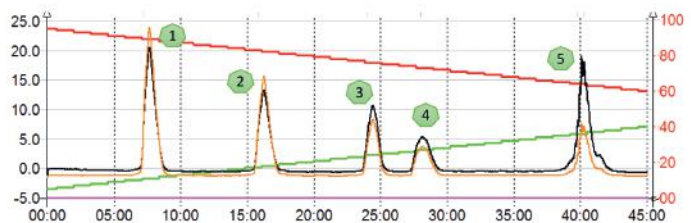


puriFlash Bio 100 C18-N

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

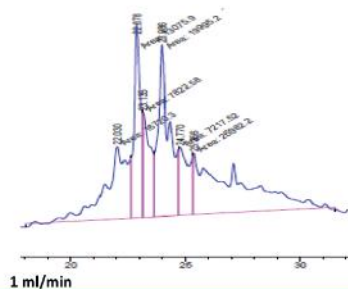
0:0 95 5

45:00 60 40

Flow Rate: 15ml/min

UV : 215, 254, 280, SCAN 200-400nm

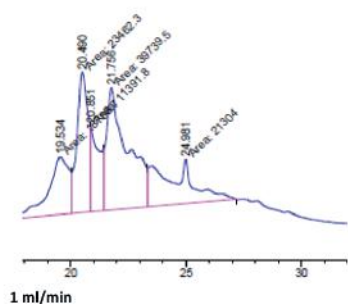
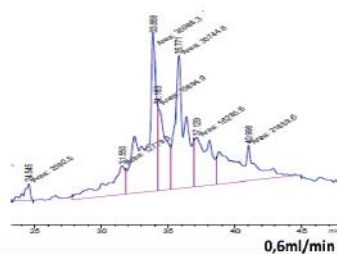
## 2KDA PEPTIDES DISCRIMINATION / PURIFLASH® BIO 100



puriFlash® Bio 100 5µm C18-N

Non end capped

P/N: PFB5C18N-250/046

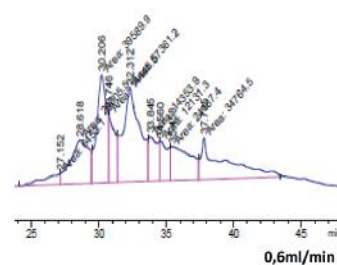


puriFlash® Bio 100 5µm C18-T

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 (µm)                         | ≤ 0.1 µm                  |
| Effective packing height                                 | ≤ 450 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 (µm)                         | ≤ 0.1 µm                  |
| Effective packing height                                 | ≤ 450 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 |
| Wetted material                                          | SUS316L                   |
|                                                          | 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 |
| Wetted material                                          | SUS316L                   |
|                                                          | 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 |
| Wetted material                                          | SUS316L                   |
|                                                          | Outside dimension         |
|                                                          | Packing method            |
| Outside dimension                                        | 650 x 650 x 2435 mm       |
| Packing method                                           | Down packing method       |



### 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: Onestep  
 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: Onestep  
 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  |

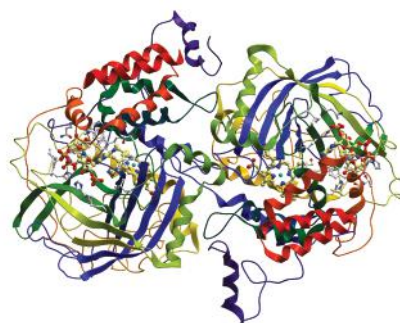
#### Particle size: 50 µm

|            |               |
|------------|---------------|
| 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-DLIIRC1808-F0004 | 5u  |
|                                       |                | F0012  | PF-DLIIRC1808-F0012 | 5u  |
|                                       |                | F0025  | PF-DLIIRC1808-F0025 | 5u  |
|                                       |                | F0040  | PF-DLIIRC1808-F0040 | 5u  |
| puriFlash® Dry-Load                   | C18 STD 50 %   | F0004  | PF-DLIIRC1805-F0004 | 5u  |
|                                       |                | F0012  | PF-DLIIRC1805-F0012 | 5u  |
|                                       |                | F0025  | PF-DLIIRC1805-F0025 | 5u  |
|                                       |                | F0040  | PF-DLIIRC1805-F0040 | 5u  |

High-Pressure Dry-Load

| Nature                                | Type  | Format          | P/N    | Qty |
|---------------------------------------|-------|-----------------|--------|-----|
| puriFlash®<br>HP Dry-Load             | Empty | 50 x<br>21.2mm  | OA0320 | 1u  |
|                                       |       | 75 x<br>21.2mm  | OA0330 | 1u  |
|                                       |       | 100 x<br>21.2mm | 7A1870 | 1u  |
|                                       |       | 50 x<br>30mm    | OA0340 | 1u  |
|                                       |       | 75 x<br>30mm    | OA0350 | 1u  |
|                                       |       | 100 x<br>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  
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South America: [quotes.SAmerica@advion-interchim.com](mailto:quotes.SAmerica@advion-interchim.com)

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South America: [info.SAmerica@advion-interchim.com](mailto:info.SAmerica@advion-interchim.com)

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**[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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