



Pure Chromatography Consumables
Pure flexibility. Pure specialization. Pure convenience.



Pure Consumables

More focus on your application

The Pure consumable portfolio offers an unrivaled range of products for any flash and prep HPLC application. Extra features and tools ensure optimal results even for challenging separations without compromising on convenience.



High Flexibility

Multiple solutions for flash and prep HPLC applications

The wide range of Pure consumables cover any need:

- Flash cartridges
- Sample loader
- Prep HPLC columns
- Glass columns

The consumables are available with numerous stationary phases and dimensions. Furthermore all are compatible with any leading flash or prep HPLC systems on the market.



Specialized Solutions

Features that go beyond your expectations

Some applications require specialized equipment. Therefore BUCHI offers customized solutions:

- Glass columns for loading capacities ≥ 300 g
- Solid loader equipment resistant up to 50 bar (725 psi)
- 70 mm ID prep HPLC columns for large scale purifications



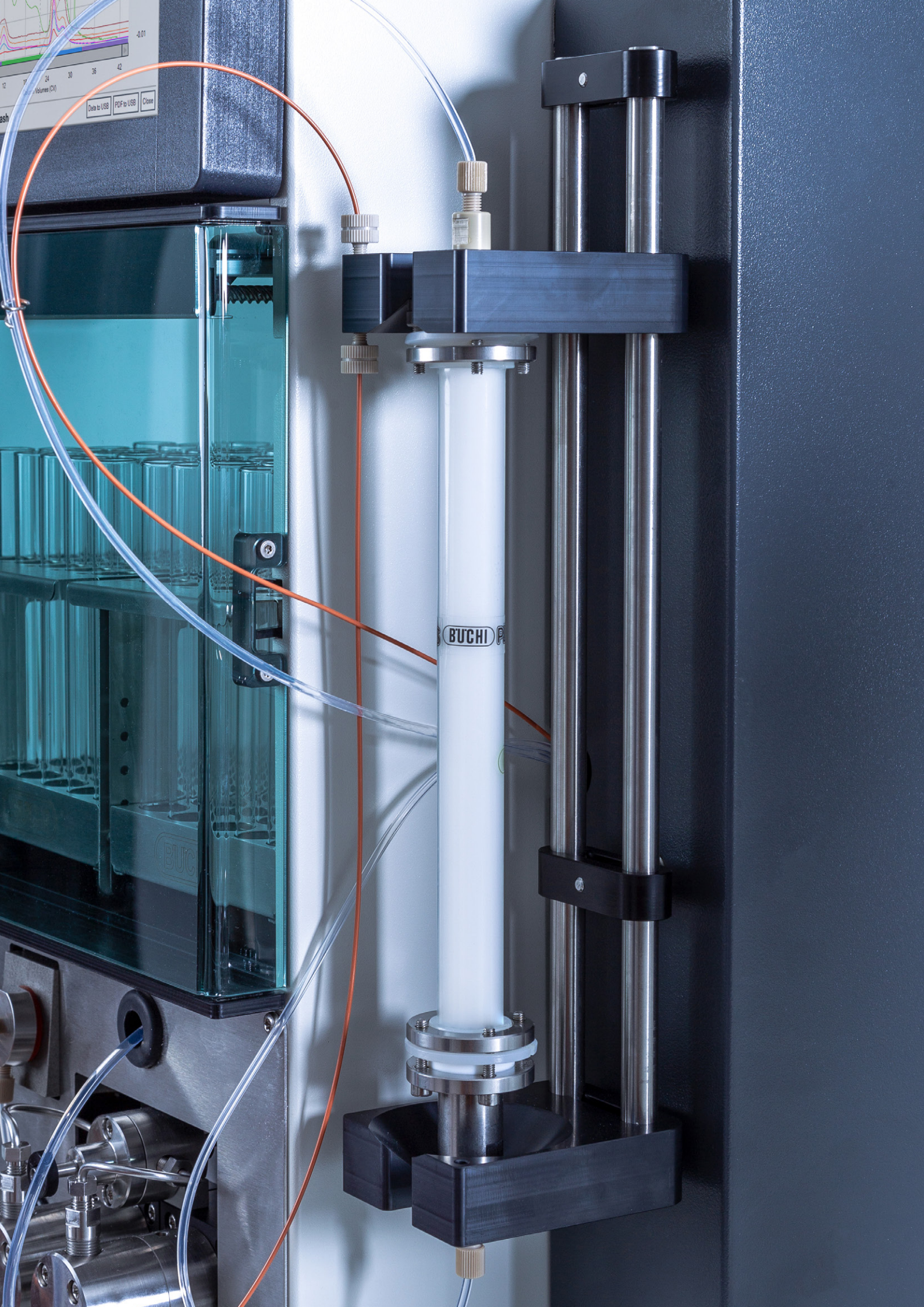
Maximum Convenience

Development of a flash method in no time

Valuable tools make the setup of a flash purification run easier and faster:

- The digital tool FlashPure Scout helps to select the cartridge that best fits your needs
- The TLC to flash navigator software simplifies method optimization

Thanks to the RFID tag on the flash cartridges, important parameters of a run get automatically transferred to the Pure system.



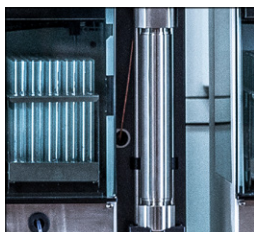
Pure Consumables

Portfolio



FlashPure

FlashPure cartridges are offered in a wide range of sizes, covering different stationary phases, particle sizes and geometries. This enables the user to choose the flash cartridge which best suits his purification needs.



PrepPure

PrepPure HPLC columns are filled with high quality silica and enable the performance of high resolution separations. Easy scalability from 4.6 – 70 mm ID and phases for standard and targeted applications make PrepPure the obvious choice for best results.



GlasPure

When a purification has to be scaled up, GlasPure offers maximum flexibility in terms of scale and separation requirements. The glass columns are designed for sample amounts over 300 g and pressure up to 50 bar (725 psi).



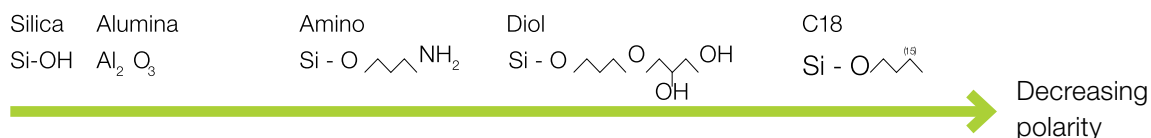
Sample Loader

The type of sample loading on a flash cartridge or a prep HPLC column has a big impact on the final purification results. With the Pure sample loading portfolio, the chemist has the choice between several convenient options.



For a wide range of flash applications

Ideal conditions for a successful separation result are given when the polarity of the target compound and the phases match. In case of solubility issues of the sample in the starting eluent, solid loading is an option (see page 14).



Phase	Ideal applications
Silica	High and medium polar compounds, most popular polar phase; mainly used for flash applications
C18	Low polar and unpolar compounds, most popular unpolar phase
Amino	High and medium polar molecules, e.g. carbohydrates and amines
Diol	Low and medium polar compounds, e.g. lipids
Alumina	Wide variety of molecules, e.g. acidic, basic or acid sensitive compounds

The Pure Navigator software improves efficiency and productivity by simplifying method optimization and taking the guesswork out of interpreting your TLC or HPLC scouting runs. The FlashPure TLC plates and HPLC scouting columns use the same silica type as the FlashPure ID and EcoFlex cartridges and therefore allow best results for upscaling applications.

- FlashPure EcoFlex Silica and Alumina coated
- Glass and aluminum backed
- Fluorescence indicator
- 20 × 20 cm size

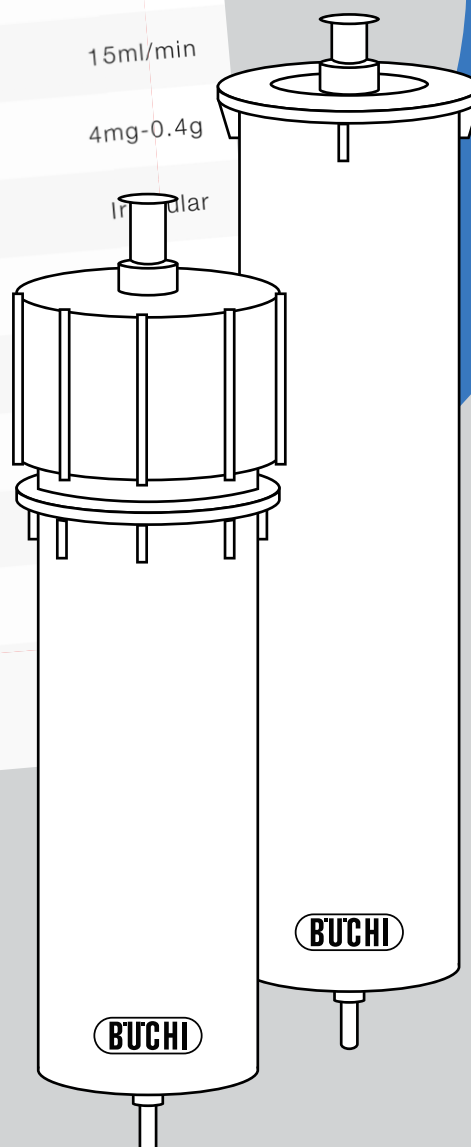
- Filled with FlashPure ID C18
- Sizes: 4.6 mm ID, 50 / 150 / 250 mm lengths

https://www.buchi.com/sites/default/files/TDS_11594058_TLC_and_Scouting.pdf



FlashPure Ecoflex Silica 12g

Family	FlashPure Ecoflex
Stationary phase	Silica
Cartridge size	4
BUCHI part number	140000021
Column volume	6ml
Max pressure	300psi/20bar
Default flow rate	15ml/min
Loading capacity	4mg-0.4g
Particle shape	Irregular
Particle size	
Pore size	
Surface area	
Carbon content	
End capping	
Automatic identification (RFID)	



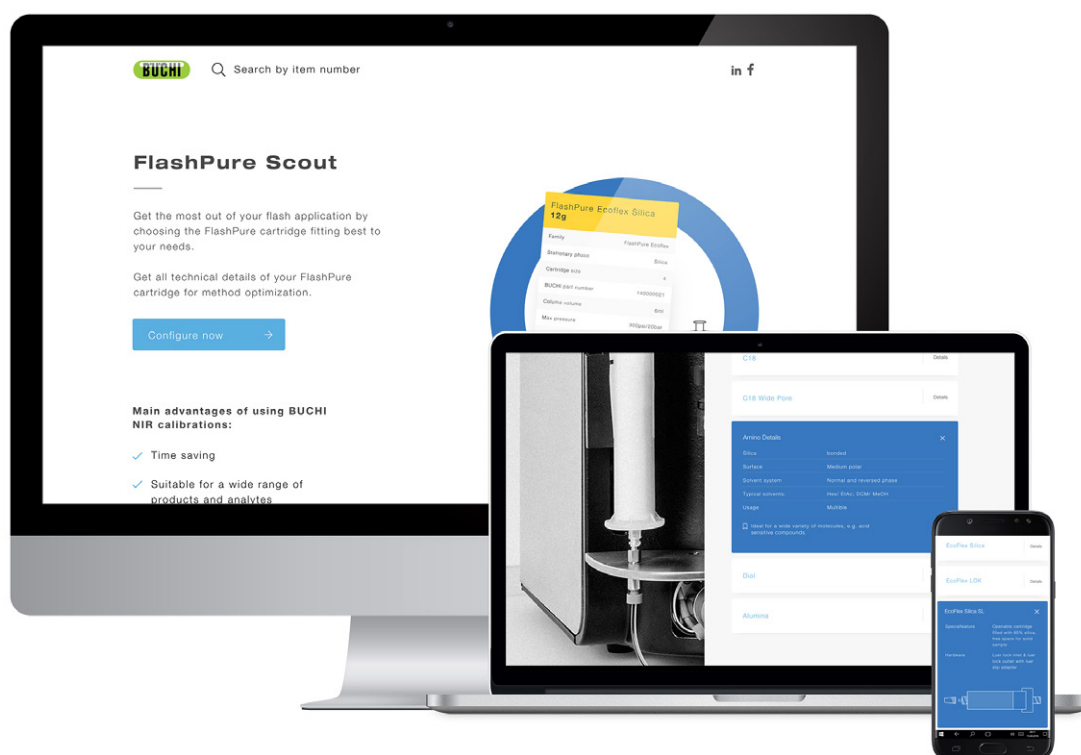
FlashPure Scout

Easily find your cartridge with FlashPure Scout

- Choose the cartridge that best fits your needs
- Learn more about parameters to improve resolution
- Get all technical details of your FlashPure cartridge for method optimization
- Easily get all item numbers and a quote for selected cartridges



More information about our cartridge finder: flashpurescout.buchi.com



FlashPure

Product overview



	FlashPure EcoFlex				FlashPure
RFID tagged cartridges	–	–	–	–	–
Non RFID tagged cartridges	●	●	●	●	●
Characteristics					
Silica	●	–	–	–	●
C18	–	●	–	–	–
Amino / Diol	–	–	●	–	–
Alumina neutral	–	–	–	●	–
Particle size [µm]	50	50	50	60	40
Irregular particle geometry	●	–	–	●	●
Spherical particle geometry	–	●	●	–	–
Pore size [Å]	55 – 75	92-108	92 – 108	50 – 70	53 – 80
Cartridge size [g]	4 – 5000	4 – 5000	4 – 330	8 – 3200	4 – 330
Luer lock fitting inlet	●	●	●	●	●
Luer slip fitting outlet	●	●	●	●	●
Luer lock with luer slip adapter fitting outlet	–	–	–	–	–
Max. loading capacity [%] (based on silica weight)	10	2.5	5	4	20

FlashPure ID		FlashPure Select	
●	●	—	—
—	—	●	●
●	—	●	—
—	●	—	●
—	—	—	—
—	—	—	—
40	40	15	30
●	●	—	—
—	—	●	●
53 – 80	53 – 80	30 – 70	92 – 108
4 – 80	4 – 330	4 – 330	4 – 330
●	●	●	●
●	●	—	●
—	—	●	—
20	5	30	5



PrepPure

Highest performance for prep applications

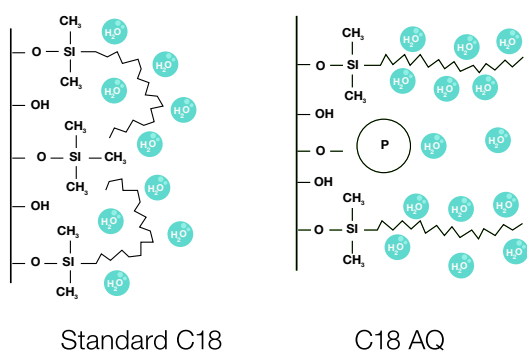
Choose Your PrepPure Stationary Phase

The successful separation of a target compound with prep HPLC requires a similar polarity of the target compound and the phase only when the sample is fully soluble in the starting eluent.

Phase	Ideal applications	Starting eluent
Silica	High and medium polar compounds, most popular polar phase	Non or mid polar organic solvents (Hexane, DCM)
C18	Low polar and unpolar compounds, most popular unpolar phase; most used in prep HPLC	Water; polar organic solvents (ACN, MeOH)
C18 AQ	Polar to medium polar compounds in a high water environment	Water; polar organic solvents (ACN, MeOH)
C4	High molecular weight compounds (> 2000 Da), such as proteins / peptides	Water; polar organic solvents (ACN, MeOH)

Specifications

Phase	Silica	C18	C18 AQ	C4
Particle size [μm]	5, 10, 15	5, 10, 15	5, 10, 15	5, 10, 15
Particle geometry	spherical	spherical	spherical	spherical
Pore size [\AA]	60	100	100	300
Column lengths [mm]	150, 250	150, 250	150, 250	150, 250
Column ID [mm]	4,6 – 70	4,6 – 70	4,6 – 70	4,6 – 70



Why use C18 AQ?

Many polar compounds prefer highly aqueous mobile phases for solubility reasons and can be retained only with a minimal concentration of organic modifier. Standard C18 shows phase collapse and poor resolution resulting from these conditions. The polar end capping of C18 AQ allows phase stabilization and better retention of polar compounds in a highly aqueous environment.

More technical information and item numbers available here:
www.buchi.com/sites/default/files/TDS_11594044_PrepPure.pdf





GlasPure

Scale-up purification

Flexible dimensions for any sorbent size

Column ID [mm]	Pressure range [bar / psi]	Capacity [g] by length			
		100 mm	230 mm	460 mm	920 mm
15	0 – 50 / 725	9	20	40	80
26	0 – 40 / 580	25	65	130	260
36	0 – 30 / 435	–	115	235	470
49	0 – 20 / 290	–	230	460	920
70	0 – 15 / 218	–	470	940	1800
100	0 – 10 / 145	–	935	1850	3700

Estimated g of silica (40 – 63 µm)

Protect your glass column

Pre-columns minimize dead volumes and enhance the life time of the main column by trapping contaminants.

Size	Pressure range [bar / psi]	Compatibility [mm]
Small	0 – 50 / 725	GlasPure ID 15 – 49
Large	0 – 20 / 290	GlasPure ID 70 – 100

Efficient filling of glass columns

A homogeneously packed column is essential to obtaining a reliable and reproducible separation. GlasPure filling sets allow packing in a fast, safe and reproducible way.

The dry filling set is ideal for filling glass columns with silica gel using compressed gas. Silica gel in the size range 25 – 200 µm can be packed with this method.

The slurry filling set is used for wet filling and conditioning of glass columns with silica gel particles smaller than 25 µm.

More technical information and item numbers available here:
www.buchi.com/sites/default/files/TDS_11594056_GlasPure.pdf

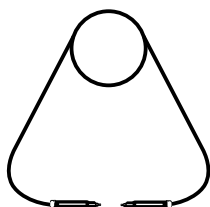


Sample Loader

Convenient choices

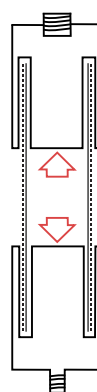
Pure Sample Loops

- Used for liquid loading
- The liquid sample gets injected manually into a loop and from there it's automatically transferred on the column
- Available loop sizes: 2 mL, 5 mL, 10 mL, 20 mL, 50 mL



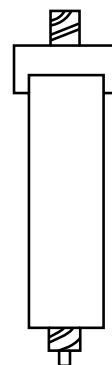
Pure Solid Loader

- Used for external solid loading
- Loader can be partially filled with the sample
- Resistant up to 50 bar (725 psi)
- Connected in front of the cartridge
- Available loader sizes: S, M



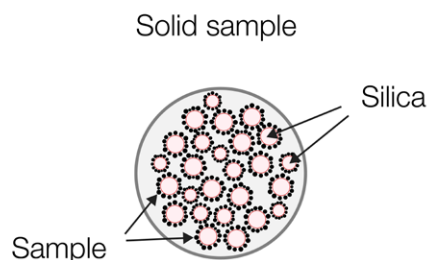
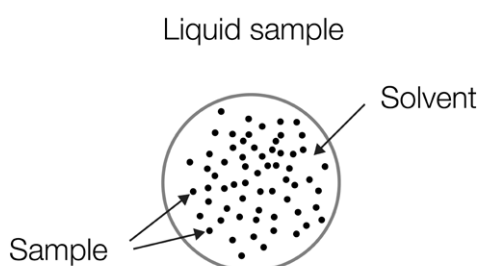
FlashPure EcoFlex Empty Solid Loader

- Used for external solid loading
- Loader needs to be filled completely with the sample
- Connected in front of the cartridge
- Available loader sizes: 12 g, 20 g, 40 g, 80 g, 120 g



Different sample loading techniques

Loading Technique	Purification Method	Procedure	Pros & Cons
Liquid loading is used for samples, which are sufficiently dissolved in the starting eluent (= weak solvent)	Flash Prep HPLC	Liquid sample (mixture of crude sample and solvent) injected via an injection valve or directly on top of the cartridge / column	Fast method but with reduced resolution
Solid loading is used for samples which are only soluble in strong solvents (\neq initial mobile phase) or to improve resolution (less band broadening and tailing effect)	Flash	Solid sample (mixture of crude sample & support material) placed in front of the cartridge	Slower method but enhanced resolution



Why add support material (e.g. silica)?

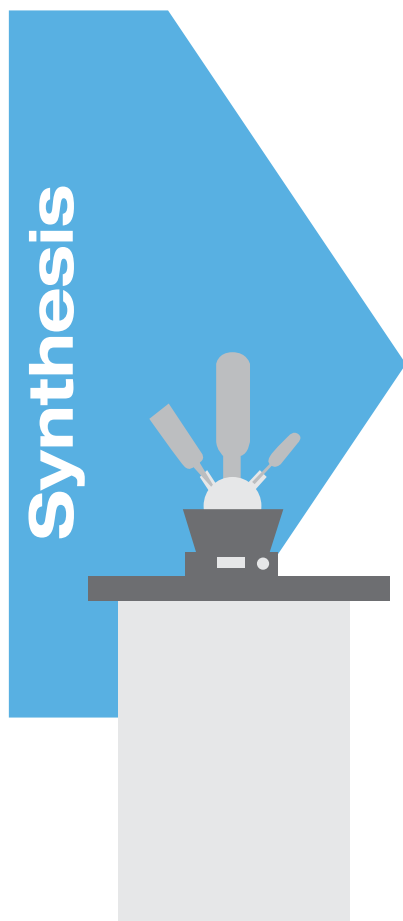
The crude sample gets absorbed on the silica which allows a better transfer and distribution of the eluted compounds. The sample is also kept in place and made stationary, which is important for work with substances such as oily extracts.

More technical information and item numbers available here:

www.buchi.com/sites/default/files/TDS_11594057_Sample_Loader.pdf



Complete your portfolio



Evaporation

We offer dedicated solutions for laboratory rotary evaporation for R&D or quality control. Based on our experience and knowledge, we offer tailor-made solutions to cover a wide range of distinct needs and achieve highest convenience.

Chromatography

Whatever the complexity or the scale of your purification process is, the BUCHI preparative chromatography systems are designed to fulfill your changing needs. Together with a broad range of high performance flash chromatography columns, we provide you the optimized solution suited to your purification workflow.



Freeze Drying

Our first laboratory Freeze Dryer with Infinite-Technology™ and Infinite-Control™. Applications range from R&D to quality control within a broad spectrum of market segments. Our solutions stand out by their efficiency and practical capability.

Analysis



Melting Point

To determine your melting and boiling points with high accuracy, visual or automatic determination and optional qualification packages meeting highest regulatory standards.

Core messages to our customers

BUCHI creates added value

«Quality in your hands» is the guiding principle that shapes our philosophy and our actions. It challenges us to provide outstanding services that are precisely tailored to your needs. This means that we must stay in close contact with our customers. That is why we keep in touch and continue to work very hard to understand you and your business even better.

We help you by providing high-quality products, systems, solutions, applications and services that offer you added value. This allows you to focus entirely on your processes and your work.



Competent

We have the technological expertise and decades of experience needed to provide competent support and work with you to continually improve our services.



Reliable

We guarantee the quality and functionality of our equipment and will continue to help you quickly and efficiently whenever something does not operate to your satisfaction.



Safe

By collaborating closely with you, we do everything in our power to make our products, systems, solutions, applications and services as safe as possible for people and the environment.



Cost-effective

We strive to create a high level of economic benefit and maximum added value for you.



Global

As an international family-owned business with own subsidiaries and qualified distributors, we have a presence wherever you are located.



Easy

We support you by providing carefully designed solutions as well as instruments and systems that are easy to operate.



Sustainable

We support environmentally friendly processes and manufacture products that have a long service life. We utilize advanced technologies to leave the smallest environmental footprint possible.

BÜCHI Labortechnik AG
CH – 9230 Flawil
T +41 71 394 63 63
F +41 71 394 64 64
info@buchi.com

www.buchi.com

Quality in your hands

