All you need for SPE Clean-up Columns, Sorbents and Accessories

Speed up - Save costs - Process smart





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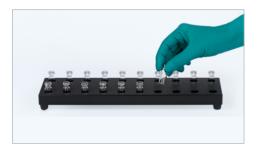
EMPTY COLUMNS

Columns for Solid Phase Extraction (SPE)

Our high-quality TINY glass columns are ideally suited for downscaling methods to smaller volumes e.g. for the determination of the hydrocarbon index according to EN ISO 9377-2, also known as the H53 method (no conditioning step needed). The specially designed column outlet enables direct elution into a GC-Vial.

They are supplied in strips of 10 and are perfect for quick manual processing of multiple samples, especially when combined with our useful TINY-GC-Vial rack. The rack gives the work step the necessary stability and enables fast processing without the need of additional equipment.





1. Insert vials in TINY-GC-Vial rack



2. Place TINY column strips on top of the vials



TINY Column empty



3. Apply sample



4. Remove TINY column strips from rack. Filled vials can be transferred for subsequent analysis.



TINY Column filled with 1 g Florisil®

Empty Glass Columns for SPE



TINY Glass Columns

Suitable for usage in combination with GC-Vial, fits on top of a GC-Vial

Part-number:	19582
Quantity:	150 pcs welded in strips of 10 pcs
Nominal content:	approx. 5 mL
Outer diameter outlet pin:	4 mm
Outer diameter:	17 mm
Length:	55 mm



Glass Columns

Wide column outlet for fast flow, adapter to luer available. Usable in FREESTYLE SPE system

Part-number:	10374
Quantity:	100 pcs welded in strips of 5 pcs
Nominal content:	approx. 14 mL
Outer diameter outlet pin:	9,5 mm
Outer diameter:	17 mm
Length:	105 mm
- 3	



Glass Columns

Wide column outlet for fast flow (e.g. ideal for manual handling of MOSH/MOAH method), adapter to Luer available

Part-number:	11156
Quantity:	110 pcs
Nominal content:	approx. 26 mL
Outer diameter outlet pin:	9,5 mm
Outer diameter:	17 mm
Length:	180 mm



Rack for 20 GC-Vials

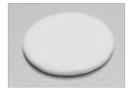
Rack holds 2 strips of TINY-columns on top of 20 GC-Vials (not included in 20227)

Part-number: 20227

Glass Fibre Filters











Fluffy and Glass Fibre Filters in comparison

Fluffy Glass Fibre Filters

Binder-free, bakeable, extra thick for easy handling and a stable position in the column. Have an equivalent flow behavior compared to the thin glass fibre filters. Ideal for all LCTech glass columns

Part-number:	17835
Quantity:	100 pcs
Diameter:	15 × 3,5 mm

Glass Fibre Filters

Binder-free, bakeable, ideal for all LCTech glass columns

Part-number:	18560
Quantity:	100 pcs
Diameter:	15 mm x 1,06 mm



Helpful Inserting Tool / Other Accessories



Frit Inserting Tool (POM)

(only for glass columns P/N 10374 and 19582)

Part-number:	14164	
Quantity:	1 pc	
Diameter:	14 mm	



Frit Inserting Tool (POM), Long Version

(only for glass column P/N 11156)

19619
1 pc
14 mm



Frit Inserting Tool (PTFE)

(only for glass columns P/N 10374 and 19582) with a pen needle for easy handling of the glass fibre filters

Part-number:	19608	
Quantity:	1 pc	
Diameter:	14 mm	



Frit Inserting Tool (PTFE), Long Version

(only for glass column P/N 11156) with a pen needle for easy handling of the glass filters

Part-number:	19620	
Quantity:	1 pc	
Diameter:	14 mm	

How to use the Frit Inserting Tool













Reusable, suitable for glass columns P/N 11156 & 10374

Part-number:	11043	
Quantity:	10 pcs	





Reservoir (2 pcs/pck), made of glass

Fits to all LCTech glass columns (P/N 10374 & 11156 as well as to all ELUFIX-columns 9370) except TINY columns. For sample load (100 mL), labwasher-proof, reusable, includes screwing and PTFE seal.

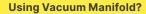
Quantity:	2 pcs
Part-number:	9370-1





Spare part for sample reservoir P/N 9370-1, PTFE (10 pcs / pck)

9373-2 Part-number:



LCTech also offers an appropriate vacuum manifold. For special application packages please see page 11. Nevertheless LCTech columns can be used on any Vacuum Manifold.

Empty Columns for SPE



SMART Column, PP

Miniaturized applications, nominal content 150 µL, incl. 2 PE filter elements.

Part-number:	12853	
Quantity:	1000 pcs	



Cap for Inlet (only for P/N 12853)

Part-number:	14328	
Quantity:	100 pcs	



Plug for Luer-Outlet (for P/N 10904 & 12853)

Quantity:	100 pcs	
Part-number:	10932	



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SPE Column, 3 mL, PP

Incl. 2 PE filter elements.

Part-number:	10904
Quantity:	1000 pcs

Cap for 3 mL SPE Column (e.g. P/N 10904)

Part-number:	14314	
Quantity:	100 pcs	

Accessories



Adapter for SPE Columns (Inlet Side)

Connects any size column onto a 1, 3, 6 or 15 mL column, with 1.5 m aspiration with PTFE tube.

Part-number: 19379



Adapter for SPE Columns (Inlet Side) for PFAS-application

Connects any size column onto a 1, 3, 6 or 15 mL column, with 1.5 m aspiration PE tube.

Part-number: 19380



Reservoir (2 pcs/pck), made of glass

Fits to all LCTech 3 mL PP columns as well as 3 mL Immunoaffinity columns. For sample load (100 mL), labwasher-proof, reusable, includes screwing and PTFE seal.

Part-number: 10896



Seals

Spare part for sample reservoir P/N 10896, PTFE (10 pcs / pck)

Part-number: 10909

Prefering pre-filled Columns? Do you have special requirements?

LCTech offers the possibility to support the filling of empty columns with individual customer material in contract manufacturing. Please send your enquiries to info@LCTech.de



Mineral Oil Hydrocarbon Index (H53 method)

If larger quantities are required, we recommend the TINY columns 9315, which are supplied in ALU pendulum packaging which prevents the entry of impurities from the packaging. For larger purchase quantities the filling amount can be customised. Contact us for detailed information about your filling needs at info@lctech.de



Elufix TINY Ready-to-Use Columns

For method H53, lot certification enclosed, suitability check and result performance according to EN ISO 9377-2, suitable for usage in combination with GC-Vial, fits on top of a GC-Vial

Filling material:	0.5 g Florisil® (150 - 250 µm)
Length:	55 mm
Outer diameter:	17 mm
Outer diameter outlet pin:	4 mm
Nominal content:	5 mL
Quantity:	welded in strips of 10 400 pcs (40 strips per package)
Part-number:	9300



Elufix TINY Ready-to-Use Columns

For method H53, lot certification enclosed, suitability check and result performance according to EN ISO 9377-2, suitable for usage in combination with GC-Vial, fits on top of a GC-Vial

Filling material:	1 g sodium sulfate & 0.5 g
	Florisil® (150 - 250 µm)
Length:	55 mm
Outer diameter:	17 mm
Outer diameter outlet pin:	4 mm
Nominal content:	5 mL
Quantity:	welded in strips of 10
	400 pcs (40 strips per
	package)
Part-number:	9305



Elufix TINY Ready-to-Use Columns

For method H53, lot certification enclosed, suitability check and result performance according to EN ISO 9377-2, suitable for usage in combination with GC-vial, fits on top of a GC-vial

Filling material:	1.0 g Florisil® (150 - 250 µm)
Length:	55 mm
Outer diameter:	17 mm
Outer diameter outlet pin:	4 mm
Nominal content:	5 mL
Quantity:	will be delivered in reusable Alumina boxes (shuttle boxes) 1820 pcs
Part-number:	9315



Elufix Ready-to-Use Columns

Made of glass for method H53, lot certification enclosed, suitability check and result performance in compliance with EN ISO 9377-2

Filling material:	2 g Florisil® (150 - 250 µm) & 2 g anhydrous sodium sulfate
Quantity:	50 pcs
Part-number:	9370

Standard Elufix Columns according to EN ISO 9377-2



Elufix Ready-to-Use Columns

Made of glass for method H53, with luer outlet, lot certification enclosed, suitability check and result performance in compliance with EN ISO 9377-2

Filling material:	2 g Florisil® (150 - 250 µm) & 2 g anhydrous sodium sulfate
Quantity:	50 pcs
Part-number:	9370-S



Elufix Ready-to-Use Columns

Made of glass for method H53, lot certificate enclosed, suitability check and result performance according to EN ISO 9377-2

Filling material:	1 g Florisil® (150 - 250 µm) & 1 g anhydrous sodium sulfate
Quantity:	50 pcs
Part-number:	9375



Elufix Ready-to-Use Columns

Made of glass for method H53, lot certificate enclosed, suitability check and result performance according to EN ISO 9377-2

Filling material:	4 g Florisil® (150 - 250 μm) & 2 g anhydrous sodium sulfate
Quantity:	50 pcs
Part-number:	9371

SPE Columns for Mycotoxin Analysis

The CrossTOX® columns allow a highly efficient sample clean-up of 17 regulated and expected mycotoxins at one go. At the same time they improve the conventional dilute-and-shoot application by a non-dispersive QuEChERS based process.

Automated processing via **FREESTYLE** for CrossTOX®



Automated processing via **FREESTYLE** for Mycotoxins





CrossTOX® Columns

(SMART-format) for mycotoxin screening, manual usage

Part-number	17900	
Qualitity.	100 pcs	
Quantity:	100 pcs	



CrossTOX® Columns

(SMART-format) for mycotoxin screening in combination with FREESTYLE for CrossTOX®

Part-number:	17901	
Quantity:	100 pcs	





Quantity:

Part-number:

clean-up of Deoxynivalenol

SPE Cartridge for manuel or automated sample clean-up of zearalenon in various

3 mL SPE cartridge for matrix removal and

25 pcs 12792

500 pcs

12793

Quantity: 100 pcs	Part-number	14741	
	Quantity:	100 pcs	

Note: Extremely well working immunoaffinity columns are available as well.

SPE Columns for Pesticide Analysis QuEChERS Application

QuEChERS à la LCTech is based on a non-dispersive clean-up step and has specially adapted columns. This covers almost all matrices within pesticide analysis in food and feed. The non-dispersive application with the columns is time saving (no shaking, no centrifugation needed) and leads to better chromatography due to the high clean-up and the associated reduced matrix ion suppression. This is reflected in very good recoveries with high reproducibility.

Automated processing via **FREESTYLE** for **QuEChERS**



For FRUITS and VEGETABLES

FREESTYLE

QuEChERS

system only

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Classic QuEChE	SPE RS Column	Quantity	Part- number:
Å	Only for manual handling	50 pcs	19853
T	Only for manual handling and for trial!	5 pcs	16682
- 2	For usage on	250 pcs	16301

For difficult matrices like TEA, **SPICES and HOPS**

PESTICIDE II

Classic QuEChl	SPE ERS Column	Quantity	Part- number:
ě	Only for manual handling	50 pcs	19854
¥	Only for manual handling and for trial!	5 pcs	16684
-	For usage on	250 pcs	16683

FREESTYLE QuEChERS system only

For matrices with high content of fat (>10 %)

PESTICIDE III

Extra SPE QuEChEF	E RS Column	Quantity	Part- number:
ħ	Only for manual handling	50 pcs	19855
Ţ	Only for manual handling and for trial	5 pcs	16686
E	For usage on	250 pcs	16685



FREESTYLE QuEChERS system only

Silica / Accessories for MOSH/MOAH

No further baking out necessary. The material is immediately ready for use and can be taken directly from our container and filled into the desired empty column.

Automated processing via FREESTYLE for MOSH/MOAH





Silica Gel 60 (60-200 µm)

Activated at 400 °C, well protected in resealable alumina bottle with QS-certificate

19600		
Sealed bottle 600 g		



Dosing Aid

For MOSH/MOAH silica bottle (P/N 19600), parts with contact to the silica made of alumina, reusable, with PTFE sealing cap

Part-number: 19529

Automated processing via FREESTYLE for: MOSH/MOAH • CrossTOX® • QuEChERS • ThermELUTE™ • Mycotoxins

The FREESTYLE system is probably the most adaptable robotic equipment for sample preparation on the market. With this almost universally applicable system range, numerous processing steps can be automated.

This robust automation fits ideally in the areas of food, feed, environmental, forensics or other fields of application. The FREESTYLE system takes on daily routine tasks in the laboratory, but also offers users an unique opportunity to combine specific working steps that were previously carried out individually. The FREESTYLE system can run reliably throughout the night and thereby work to optimum capacity.

Flexible Configuration and Combination

The FREESTYLE modules can be individually combined and retrofitted, which offers the opportunity to adapt the FREESTYLE system to the changing requirements of daily laboratory challenges at any time.

Different installed modules, e.g. the SPE- with the EVAporation-module, can be used individually or in combination. The required function is determined exclusively through method selection in the software, where methods can be saved, called up at any time or mixed in sample lists. There is no need for any mechanical changes or conversions.



FREESTYLE robotic system configured for CrossTOX®

Which application would you like to automate?

Convince yourself of our competence and contact us for an individual consultation or a quotation at info@lctech.de

Vacuum Manifold

The EluVac Vacuum Manifold allows simultaneous manual processing of up to 20 samples with the possibility of applying vacuum.



EluVac, Vacuum Manifold

20 samples simultaneously, vacuum regulation unit, beaker / central drain tube, tubing, 20 valves, 20 plugs, manual. Delivered without vacuum pump, without consumables.

11048 Part-number:



Holder for EluVac

For up to 10 sample reservoirs (P/N 10896, 9370-1)

Part-number: 11098



Part-number:



For 2 mL Eppendorf tubes / 20 samples simultaneously

14274



For 4 mL vials (P/N V0004) / 20 samples simultaneously

11105



For 5 mL volumetric flasks,

ground joint NS 11/19 samples 14191

simultaneously

For 8 mL vials / 10 samples 13697 simultaneously



For 15 mL Starstedt tubes / 20 samples simultaneously

14275



For 60 mL bottles (P/N F060) / 10 samples simultaneously

11118



For **120 mL** bottles (P/N F100-D) / **12767** 10 samples simultaneously

For sample collection in max. 6 pear shaped rotary evaporator flasks. For usage in combination.



For up to 6 sample reservoirs - on top

Part-number: 11560



Collection Rack

For 100 mL pear shaped rotary evaporator bottles, NS 29/32 (P/N 11106)

11112 Part-number:

Pear shaped rotary evaporator bottles

NS 29/32 (P/N 11106)

Part-number: 11106



ME 2 NT, Diaphragm **Pump**

Part-number:

One stage, 230V / 50-60 Hz, 13041 CEE Cable certification (NRTL):

One stage, 230V / 50-60 Hz, 13207 UK Cable certification (NRTL):

C/US

One stage, 110-115V / 13208 50-60 Hz US Cable

certification (NRTL): C/US



ME 2C NT, Diaphragm **Pump**

Part-number:

13042

13210

One stage, "Chemistry", 230 V, 50-60 Hz, CEE Cable

certification (NRTL): C/US

One stage, "Chemistry", 230 V, 50-60 Hz, **UK Cable** certification (NRTL): C/US

13209

One stage, "Chemistry", 110-115 V, 50-60 Hz, 120 V, 60 Hz, US Cable certification

(NRTL): C/US

Adapter / Reduction Insert

Suitable for collection rack (P/N 11105) for 4 mL vials to 1 mL GC-vials

Part-number: 12820



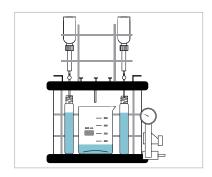
With special screw cap and 2 m tubing

Part-number:

F10000B



Application Packages for Vacuum Manifold



Suitable for...

applications of up to 60 mL elution volume e.g. for the determination of the *hydrocarbon index* according to EN ISO 9377-2 (also known as the H53 method).

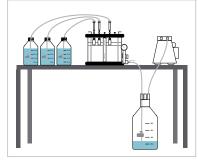
Matching Packages:

EluVac, Vacuum Manifold Package

20 samples simultaneously, consits of: EluVac - vacuum manifold (P/N 11048), sample rack (P/N 11098), and collection rack for 60 mL bottles (P/N 11118)

Part-number:

11146

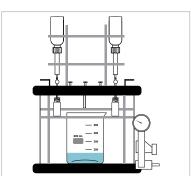


large volume samples e.g. PFAS applications.

EluVac, Vacuum Manifold Package

For high sample volume, e.g water, milk, etc. 20 samples simultaneously, for high sample, consits of: EluVac - vacuum manifold (P/N 11048), collection rack of 4 mL vials (P/N 11105), 10 SPE-column-adapters with PTFE-tube (P/N 19379), 10 SPE-column adapters with 1,5 m PE tube (P/N 19380) additionally for **PFAS application** and Woulff's bottle, 10 L (P/N F10000B)

Part-number: 11739

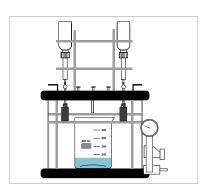


applications with an elution volume of up to 4 mL e.g. *mycotoxin sample* preparation.

EluVac, Vacuum Manifold Package

20 samples simultaneously, consits of: EluVac - vacuum manifold (P/N 11048), sample rack (P/N 11098), and collection rack for 4 mL vials (P/N 11105)

Part-number: 12415

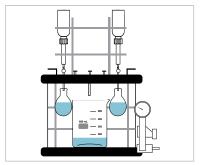


applications with *low elution volume* up to 1 mL.

EluVac, Vacuum Manifold Package

20 samples simultaneously, consits of: EluVac - vacuum manifold (P/N 11048), collection rack (P/N 11098), and collection rack for 4 mL vials (P/N 11105), and sample rack (P/N 11098) 20 adapters/reduction insert for 1 mL GC-vials (P/N 12820)

Part-number: 12856



applications of up to 100 mL elution volume in *rotary evaporator bottles*.

EluVac, Vacuum Manifold Package

20 samples simultaneously, consits of: EluVac - vacuum manifold (P/N 11048), sample rack (P/N 11560), collection rack for pear rotary evaporator bottles (P/N 11112), and 6 pear shaped rotary evaporator 100 mL bottles (P/N 11106)

Part-number: 11147

Please note that columns, bottles and reservoirs have to be ordered additionally

Contact us for more solutions for your laboratory:

info@LCTech.de

