



Green Earth
page 3

2 0 0 8



ENVIRO

800.541.0559 www.unitedchem.com



ENVIRO

From our modest beginnings in Horsham, PA in 1986, UCT, Inc. has evolved into a major competitor in the field of solid phase extraction technology. UCT is also an internationally recognized leader in the production of specialty chemicals including silanes and silicones. Our expertise in silane manufacturing allows greater control of the chemical processes involved in producing our high quality bonded phases.

UCT manufactures a wide range of highly reproducible cartridges from our proprietary polypropylene* allowing the analytical chemist a consistent extraction technique

virtually free of extractables. For the discriminating chemist, we offer our products in glass cartridges.

We have a strong reputation with the drug testing industry for dependable service, competitive pricing, innovative technology and reproducible products. We have now expended that reputation to include the environmental and agricultural testing industry.

UCT is pleased to bring you this catalogue containing our ever growing line of environmental testing products. We appreciate your support and look forward to your business. It is our promise to ensure your satisfaction by providing the best products, technical support, and service which you, our customer, demand and deserve.



In 1986, our synthetic polymer group introduced two new concepts into bonded phase extraction technology - copolymeric phases and reproducibility.

For years extraction chemists have been excited by the power and diverse applicability of bonded phase extraction, only to be disappointed by the lot to lot variability of products they received. Our polymerization methods have made this problem a thing of the past.

In constant pursuit of a better product, we acquired our raw materials supplier in 1993. This added greater depth to our knowledge of the manufacturing process for SPE silicas. We are now vertically integrated to better serve the SPE market.

We have now introduced our chemistries into a variety of products including bonded silica membranes, 48/96 well plates, GC liners, derivatizing agents, flash chromatography cartridges, and pre-packed polymeric cartridges.

WASTE WATER | PESTICIDES | OIL & GREASE | PAH

A significant effort has been put into learning and developing the polymeric silicon chemistries related to silica gel and its surface modified polymers. Our company's product line has grown to include over 35 different bonded phases used regularly by extraction chemists, as well as a variety of other SPE products.

Once you choose our products and support, you will understand why we are praised by our customers. The results will speak for themselves. We will work with you to meet your needs and to help you increase the ease, efficiency and cost effectiveness of your extractions.

* available in 1mL, 3mL, 6mL, 10mL and 15mL sizes



CUSTOMER SERVICE

PRICES AND TERMS

Our prices are subject to change without notice. The price in effect when we receive your order will apply. All prices are in US Dollars and are F.O.B. Lewistown, PA 17044.

Terms of payment are net 30 days.

MINIMUM ORDERS

We welcome all orders, therefore, we do not have a minimum order requirement. When ordering, please include your purchase order number, complete "Ship To" and "Bill To" address, catalog number, quantity, and description of product(s). Also include your name and a phone number where you can be reached should we have any questions concerning your order.

Custom items will be evaluated on an individual basis; quantity requirements may be necessary.

SHIPMENTS

Normal processing is within 24 hours after receipt of an order. Unless special shipping requests have been made, our trained staff will send all orders by UPS Ground service. The appropriate shipping charges (freight & insurance costs) will be added to the invoice, unless otherwise instructed by the customer.

SPECIAL PRICING

We offer special pricing for volume purchases and standing orders. These discounts apply to bonded phase extraction column purchases only. Please call a sales representative for more information on special pricing qualifications.

RETURN POLICY

Our Quality Manager will handle all returns. Before returning merchandise, please call to obtain a return authorization number from the quality manager. We will need to know the reason for the return, date of purchase, purchase order number and invoice number in order to issue a return authorization number. Return merchandise must be received before a credit can be issued. Returns will not be accepted after 90 days. A restocking fee of 25% of the price paid, or a minimum of \$25.00 (whichever is greater) will be charged on all returns.

WARRANTY

All products manufactured by UCT are guaranteed against defects in materials and workmanship for a period of 90 days after shipment. UCT will replace any items that prove to be defective during this time period.

The exclusive remedy requires the end user to first advise UCT of the defective product by phone or in writing. Secondly, the defective product must be returned within 30 days after proper approval from our Quality Manager. All returns must indicate the purchase order number, the lot number and the shipping date. UCT's total liability is limited to the replacement cost of UCT products.

This warranty does not apply to damage resulting from misuse.

Placing An Order

Phone: 717.247.0896
800.541.0559
Fax: 717.247.0109

Mail

UCT, Inc.
2731 Bartram Rd.
Bristol, PA 19007

Technical Support

Phone: 215.781.9255
800.385.3153
Fax: 215.785.1226
Email: info@unitedchem.com
Forum: forums.unitedchem.com
Web: www.unitedchem.com





A GREENER EARTH

This catalogue has been printed on 100% de-inked recycled,
50% post-consumer waste coated paper.

Here at UCT, Inc. we are making an effort to keep the planet cleaner
and greener for everyone. It is our belief that we must act now to
preserve our environment for future generations to come.

Organizations we support:

Arbor Day Foundation

Audubon Society

Sierra Club

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UCT reagents are available for the analysts who need the convenience of various materials in bulk form. Bulk reagents are specially prepared to eliminate potential contamination assuring optimum analytical results. Reagents are available in a variety of sizes for ordering convenience.

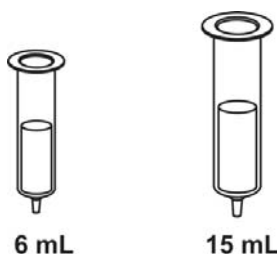




PRODUCT NAME	PART NUMBER	QUANTITY
Copper Granules 99.5% 30 Mesh	ECCU01K	1kg
	ECCU05K	5kg
	ECCU10K	10kg
Alumina Activity Super I, Neutral	ECALN00D	500g
	ECALN01K	1kg
	ECALN03K	3kg
Alumina Activity Super I, Basic	ECALB00D	500g
	ECALB01K	1kg
	ECALB03K	3kg
Alumina Activity Super I, Acid	ECALA00D	500g
	ECALA01K	1kg
	ECALA03K	3kg
Florisol® A 100-200 Mesh	ECFLOR00D	500g
	ECFLOR03K	3kg
Florisol® PR	ECFLS00D	500g
	ECFLS03K	3kg
Sodium Chloride ACS Grade	ECNAACL05K	5kg
	ECNAACL10K	10kg
	ECNAACL50K	50kg
Ottawa Sand	ECOTT05K	5kg
	ECOTT10K	10kg
	ECOTT25K	25kg
Sodium Sulfate Anhydrous ACS Grade Granular 60 Mesh	ECSS05K	5kg
	ECSS10K	10kg
	ECSS25K	25kg
	ECSS50K	50kg
Silica Gel 100-200 Mesh suitable for column chromatography	ECSIOH00D	500g
	ECSIOH03K	3kg
Magnesium Sulfate Anhydrous Organic Free Powder Reagent, 99.5% min.	ECMAG00D	500g (1 unit)
	ECMAG00DCS	1 case (4 units)
Celite 566 Hydromatrix Substitute	EC56601K	1kg
	EC56603K	3kg

SPECIALTY CARTRIDGES AND DISKS

FOR ENVIRONMENTAL EXTRACTION AND CLEAN UP



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PRODUCT NAME	DESCRIPTION	PART NUMBER	AMT. SORBENT/ TUBE VOL.	UNITS
CLEAN-ELUTE™	A diatomaceous earth matrix capable of being used within a pH range of 1-13.	CLEANELUTE	25,000mg/200mL	108
Florisil® PR	Pesticide Residue grade Florisil® in the cleanest cartridge on the market.*	EUFLS1M6	1000mg/6mL	30
Florisil® A	Equivalent to PR grade, but with a smaller particle size. Preferred by many environmental testing labs.*	EUFLSA1M6	1000mg/6mL	30
ENVIRO-CLEAN® EPH Fractionation	(Gravity Flow) Developed for fractionation of MA EPH. Cartridge is capped at both ends to assure silica integrity.	XRSIHT13M15	3000mg/15mL	24
ENVIRO-CLEAN® C18	Optimized for non polar analytes, including pesticides, PCBs, PAHs, and formaldehyde.	EEC181M6	1000mg/6mL	30
ENVIRO-CLEAN® C18 Polar	For non polar and moderately polar analytes.	EUC181M6	1000mg/6mL	30
ENVIRO-CLEAN® 548	For EPA Method 548.1 Endothall extraction.	EC548006	6mL	30
ENVIRO-CLEAN® PS-DVB	EPA Method 526, 527*, 528, 529 and 8330	ECDVB156	500mg/6mL	30
ENVIRO-CLEAN® 521	Activated carbon for EPA Method 521	EU52112M6	2000mg/6mL	20
ENVIRO-CLEAN® 535	Graphitized carbon for EPA Method 535	EC535156	500mg/6mL	30
ENVIRO-CLEAN® C08	C08 for EPA Method 549 Diquat and Paraquat	EEC08156	500mg/6mL	50
SODIUM SULFATE ANHYDROUS DRYING CARTRIDGE	A convenient product for the drying of extracts prior to concentration and analysis.	ECSS15M6	5000mg/6mL	30
HIGH LIPID CLEAN-UP	For the clean-up of agricultural matrices containing high levels of lipids. See application note.	ECPSAC1856	1000mg/6mL	30

*disk for method 527

Florisil® is a registered trademark of U.S. Silica.



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POLYCYCLIC AROMATIC HYDROCARBONS FROM A WATER MATRIX

Part Number: ECUNIPAH

Reagents:

Methanol

Acetonitrile**

Methylene Chloride**

Anhydrous Sodium Sulfate (# ECSS25K)

Enviro-Clean® Universal PAH cartridge (# ECUNIPAH)

Condition Cartridge

Add 10 mL of methylene chloride to the cartridge and let it soak for 1 minute. Draw through to waste. Add 10 mL of acetone to the cartridge and let it soak for 1 minute. Draw through to waste. Add 10 mL of methanol to the cartridge and let it soak for 1 minute. Pull most of the methanol to waste but do not allow the sorbent to dry. Add 10 mL of deionized water to the cartridge and let it soak for 1 minute. Draw most of the water to waste but do not allow the sorbent to dry.

Sample Addition

Add 5 mL of methanol (optional) and any surrogates to the sample. Mix. Add the sample to the cartridge under vacuum. Ideally, the sample should pass through the cartridge in approximately 15 – 20 minutes. Allow the cartridge to dry under vacuum for 10 minutes.***

Extract Elution

Place a collection tube or vial under the cartridge. Add 5 mL of acetone to the sample bottle to remove any sample residue. Add the acetone to the cartridge. Allow to soak for 1 minute and draw the solvent into the collection device. Repeat this procedure three more times using 10 mL aliquots of methylene chloride. Dry the extract by passing it through anhydrous sodium sulfate. Thoroughly rinse the collection device with methylene chloride and add this solvent to the sodium sulfate.

Concentration and Analysis

Carefully concentrate the extract to a final volume. Note: Most extraction errors are caused by poor concentration technique. Do not concentrate below 0.5 mL or low recoveries will result.

The Enviro-Clean® Universal PAH cartridge can be used on standard vacuum manifolds (# VMFF016GL), standard disk manifolds (#ECUCTVAC6) (with adapter part # ECUC-TADP). The cartridge is specifically designed to fit the Horizon SPE DEX 4790® made by Horizon Technologies, Inc.

** Acetonitrile may be substituted for acetone and methylene chloride.

*** Faster drying results can be obtained by removing the cartridge during drying and shaking or tapping the excess moisture from the bottom of the cartridge. Drying times are approximate. Do not over dry. Low recoveries could result.

ENVIRO MANIFOLD



ENVIRO-CLEAN® UNIVERSAL CARTRIDGES

(FITS THE HORIZON SPE-DEX® 4790 AUTOMATED EXTRACTION SYSTEM)



UNIVERSAL
OIL & GREASE



UNIVERSAL
525



UNIVERSAL
PAH / DRO



UNIVERSAL
C18

PRODUCT NAME	DESCRIPTION	PART NUMBER	AMT. SORBENT/ TUBE VOL.	UNITS
UNIVERSAL OIL & GREASE	For EPA Method 1664A	ECUNIOGXF	2000mg/83mL	15
UNIVERSAL 525	For EPA Method 525.2	ECUNI525	1500mg/83mL	8
UNIVERSAL PAH / DRO	For PAH and Diesel Range Organics extractions	ECUNIPAH	2000mg/83mL	8
UNIVERSAL C18	For extraction of pesticides, herbicides and PCBs, etc.	ECUNIC18	1100mg/83mL	8

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ENVIRO-CLEAN®

UNIVERSAL CARTRIDGES RESERVOIRS



PART NUMBER	DESCRIPTION	UNITS
FRITTED RESERVOIRS 20µm		
ERFT1FUNIP	1 (1/16", 20µm) Teflon frit	10
ERFT2FUNIP	2 Teflon frits	10
FRITTED RESERVOIRS 50µm		
ERTFT1FUNIP	1 50µm Teflon frit	10
EMPTY RESERVOIRS		
ERFV00UNIP	Empty Reservoir	10



ENVIRO

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QuEChERS

DISPERSIVE SPE EXTRACTION AND CLEAN-UP PRODUCTS

Designed for Use with the QuEChERS Method:
Quick, Easy, Cheap, Effective, Rugged and Safe approach for
determining pesticide residues, developed at the USDA-ARS
Eastern Regional Research Center in Wyndmoor, PA.



PART NUMBER	DESCRIPTION	UNITS
ECMSSA50CT	50mL PP centrifuge tubes with 6g Anhydrous Magnesium Sulfate, 1.5g Anhydrous Sodium Acetate	250/pack
ECMSSC50CT	50mL PP centrifuge tubes with 4g Anhydrous Magnesium Sulfate, 1g NaCl	250/pack
EUMIV50CT	50 mL PP centrifuge tube with 6g of magnesium sulfate anhydrous, 1.5g of sodium chloride, 1.5g of sodium citrate dihydrate, 750 mg of disodium citrate sesquihydrate	250/pack
ECMSSC50CTFS	50mL PP centrifuge tubeds with 1500 mg sodium chloride and 6000 mg of magnesium sulfate anhydrous	250/pack
ECMPSA50CT	1200mg magnesium sulfate anhydrous and 200 mg PSA in a 50 mL centrifuge tube	250/pack
CUMPSCB2CT	2mL micro-centrifuge tubes with 150mg Magnesium Sulfate, 50mg PSA, 50mg carbon	100/pack
CUMPS2CT	2mL micro-centrifuge tubes with 150mg Anhydrous Magnesium Sulfate, 50mg PSA	100/pack
CUMPSC18CT	2mL micro-centrifuge tubes with 150mg Anhydrous Magnesium Sulfate, 50mg PSA, 50mg endcapped C18	100/pack
CUMPS15C18CT	150mg magnesium sulfate anhydrous, 150 mg PSA and 50 mg of endcapped C18 in a 2 mL centrifuge tube	100/pack
ECPURMPSMC	180 mg PSA and 110 mg of magnesium sulfate anhydrous in a male/female luer cartridge for "Quick QuEChERS application"	100/pack
ECMPSCB15CT	15mL centrifuge tubes with 900mg Anhydrous Magnesium Sulfate, 300mg PSA & 150mg graphitized carbon	50/pack
ECMPSC1815CT	15mL centrifuge tubes with 900mg Anhydrous Magnesium Sulfate, 300mg PSA & 150mg endcapped C18	50/pack
ECMS12CPSA415CT	1200mg magnesium sulfate anhydrous and 400 mg PSA in a 15 mL centrifuge tube	50/pack
ECMNAX15CT	900mg magnesium sulfate anhydrous, 150 mg Aminopropyl in a 15 mL centrifuge tube	50/pack
ECPSACB6	6mL columns with 400mg PSA on bottom, 200mg Graphitized Carbon Black on top, Separated by a Teflon frit	30/pack
ECPSACB256	6mL columns with 250mg graphitized carbon on top, 500mg PSA on the bottom, separated with a Teflon frit*	30/pack
ECPSACB506	6mL columns with 500mg graphitized carbon on top, 500mg PSA on the bottom, separated with a Teflon frit*	30/pack
ECNAXCB506	6mL column with 500 mg graphitized carbon on top and 500 mg of Animopropyl on bottom separated by a Teflon frit.	30/pack



ENVIRONMENTAL METHOD DEVELOPMENT KITS



6 mL

ENVIRONMENTAL CARTRIDGES METHOD DEVELOPMENT KIT 7 PKS / 5 EA

EEC181M6	1000 mg endcapped C18
EUC181M6	1000 mg unendcapped C18
EUFLSA1M6	1000 mg Florisil® A
ECDVB156	500 mg polystyrene divinylbenzene
EC535156	500 mg graphitized carbon
EEC08156	500 mg endcapped C08
EUALN1M6	1000 mg neutral Alumina

This kit contains 7 different cartridges that are most commonly used in environmental applications. These cartridges contain endcapped and unendcapped C18, polystyrene divinylbenzene, graphitized carbon, Florisil® A, endcapped C08, and neutral Alumina.

Kit Part# MDK-ENV



ENVIRONMENTAL UNIVERSAL METHOD DEVELOPMENT KIT 4 PKS / 5 EA

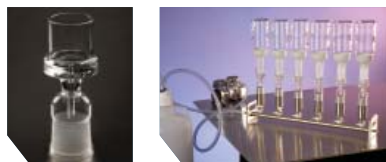
ECUNI525	1500 mg special blend unendcapped C18
ECUNIPAH/DRO	2000 mg unendcapped C18
ECUNIC18	1100 mg endcapped C18
ECUNIOGXF	2000 mg Oil and Grease XF

This kit contains 4 of our Universal cartridges, including our most versatile product, the Universal 525 cartridge which contains a special blend of unendcapped C18.

Kit part# MDK-ENV-UNI

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ENVIRO-CLEAN®

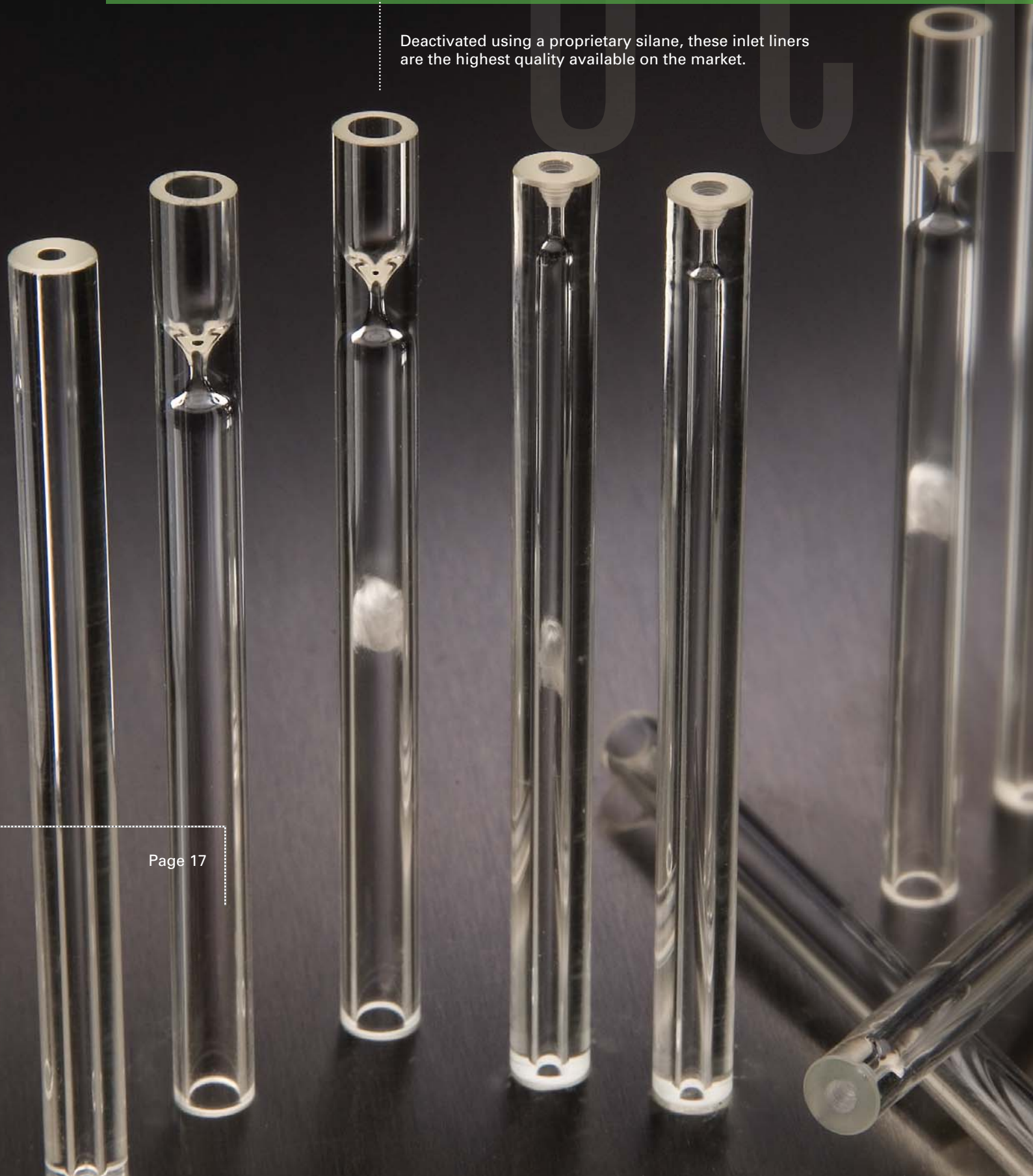
DISK MANIFOLD AND ACCESSORIES

PART NUMBER	DESCRIPTION	UNITS
ECUCTVAC1	1 Station Manifold	1
ECUCTVAC3	3 Station Manifold	1
ECUCTVAC6	6 Station Manifold	1
ECCG1420	47mm Aluminum Clamp	1
ECUC0502	90mm Aluminum Clamp	1
ECOSB47	47mm Support Base	1
ECQFN300	47mm 300mL Funnel	1
ECOSB90	90mm Support Base	1
ECQFN1000	90mm 1000mL Funnel	1
ECUCT47	47mm KEL-F Screen	1
ECUCT90	90mm KEL-F Screen	1
ECUCTADP	Cartridge Adaptor	1
ECUNIBHD	Bottle Holder	1
ECROCKER400	Vacuum Pump	1
ECVMF06	Teflon Stopcocks for Block Manifolds	6
ECUCTTRAP20	20L Waste Trap	1



GC LINERS

Deactivated using a proprietary silane, these inlet liners are the highest quality available on the market.



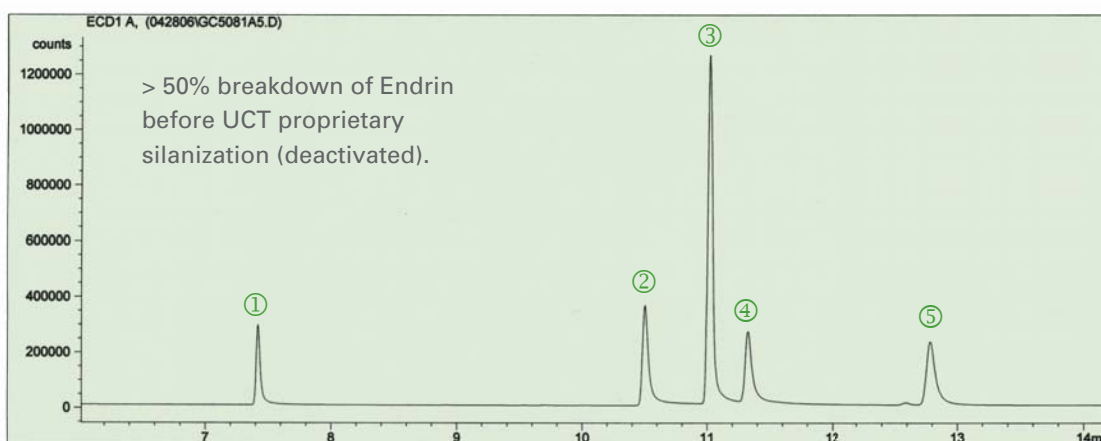
GC LINER CHROMATOGRAMS

CONFIRMING PEAKS

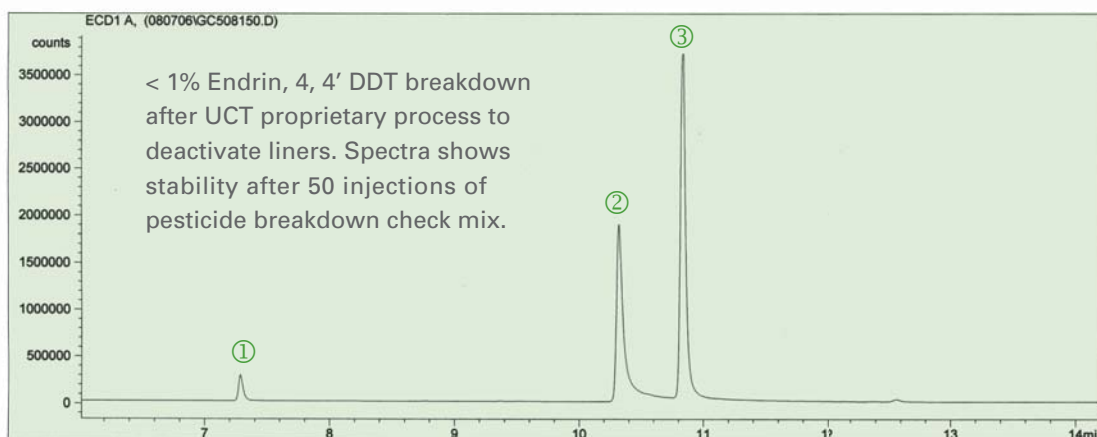
- | | |
|--------------------------------|-------------------|
| ① Pentachloronitrobenzene (IS) | ④ Endrin Aldehyde |
| ② Endrin | ⑤ Endrin Ketone |
| ③ 4, 4' DDT | * 4, 4' DDD |
| | * 4, 4' DDE |

* Showed no breakdown from 4, 4' DDT in pesticide breakdown standard.

BEFORE SILANIZATION (NOT DEACTIVATED)








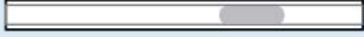

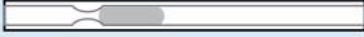




AFTER SILANIZATION / POST 50 INJECTIONS (DEACTIVATED)



We carry a wide selection of inlet liners for Agilent and Perkin-Elmer® Gas Chromatographs.

The liners are deactivated using a proprietary silane manufactured by UCT.



	2mm Straight Splitless 2.0mm ID x 6.5mm OD x 78.5mm Instrument: Agilent • Part Number: 5181-8818	Part Number GCL2MM GCL2MM-5 GCL2MM-25	Quantity 1 5 25
	2mm Straight Splitless with Deactivated Glass Wool 2.0mm ID x 6.5mm OD x 78.5mm Instrument: Agilent • Part Number: 5181-8818	Part Number GCL2MMGW GCL2MMGW-5 GCL2MMGW-25	Quantity 1 5 25
	2mm Splitless Gooseneck 2.0mm ID x 6.5mm OD x 78.5mm Instrument: Agilent	Part Number GCLGN2MM GCLGN2MM-5 GCLGN2MM-25	Quantity 1 5 25
	2mm Splitless Gooseneck with Deactivated Glass Wool 2.0mm ID x 6.5mm OD x 78.5mm Instrument: Agilent	Part Number GCLGN2MMGW GCLGN2MMGW-5 GCLGN2MMGW-25	Quantity 1 5 25
	4mm Straight Splitless 4.0mm ID x 6.5mm OD x 78.5mm Instrument: Agilent • Part Number: 210-3003	Part Number GCL4MM GCL4MM-5 GCL4MM-25	Quantity 1 5 25
	4mm Straight Splitless with Deactivated Glass Wool 4.0mm ID x 6.5mm OD x 78.5mm Instrument: Agilent • Part Number: 19251-60540	Part Number GCL4MMGW GCL4MMGW-5 GCL4MMGW-25	Quantity 1 5 25
	4mm Splitless Recessed Gooseneck 4.0mm ID x 6.5mm OD x 78.5mm Instrument: Agilent	Part Number GCLRGN4MM GCLRGN4MM-5 GCLRGN4MM-25	Quantity 1 5 25
	4mm Splitless Recessed Gooseneck with Deactivated Glass Wool 4.0mm ID x 6.5mm OD x 78.5mm Instrument: Agilent	Part Number GCLRGN4MMGW GCLRGN4MMGW-5 GCLRGN4MMGW-25	Quantity 1 5 25
	4mm Splitless Gooseneck 4.0mm ID x 6.5mm OD x 78.5mm Instrument: Agilent • Part Number: 5181-3316	Part Number GCLGN4MM GCLGN4MM-5 GCLGN4MM-25	Quantity 1 5 25
	4mm Splitless Gooseneck with Deactivated Glass Wool 4.0mm ID x 6.5mm OD x 78.5mm Instrument: Agilent • Part Number: 5062-3587	Part Number GCLGN4MMGW GCLGN4MMGW-5 GCLGN4MMGW-25	Quantity 1 5 25
	4mm Straight Splitless Open Top Uniliner 4.0mm ID x 6.5mm OD x 92.1mm Instrument: Perkin-Elmer	Part Number GCLUN4MM GCLUN4MM-5 GCLUN4MM-25	Quantity 1 5 25
	4mm Straight Splitless Open Top Uniliner with Deactivated Glass Wool 4.0mm ID x 6.5mm OD x 92.1mm Instrument: Perkin-Elmer	Part Number GCLUN4MMGW GCLUN4MMGW-5 GCLUN4MMGW-25	Quantity 1 5 25

DRAWING NOT TO SCALE

ENVIRO EC548006

Our 548 cartridge is specifically designed to fulfill the requirements of EPA Method 548.1 DETERMINATION OF ENDOTHALL IN DRINKING WATER BY ION-EXCHANGE EXTRACTION, ACIDIC METHANOL METHYLATION AND GAS CHROMATOGRAPHY/MASS SPECTROMETRY



ENVIRO-CLEAN® SORBENTS

ENVIRO-CLEAN® solid phase extraction cartridges are designed especially for the isolation and separation of environmental analytes such as pesticides, herbicides, polyaromatic hydrocarbons, polychlorinated biphenyls and other environmentally related compounds.

ENVIRO-CLEAN® offers a selection of high quality solid phase extraction cartridges geared to support the environmental chemist with a very broad range of analytical applications. The most important function of the solid phase extraction cartridge for the environmental chemist is the clean separation of an analyte from a variety of compounds. An important function of the extraction cartridge is that it will concentrate a low level of analyte from large samples for accurate analysis. When evaluating analyte extraction or separation, ENVIRO-CLEAN® offers nonpolar, polar, ion-exchange and copolymeric phases for application in the environmental laboratory.

Non-polar phases are often referred to as hydrophobic and function by the interactions of the carbon-hydrogen bond of the analyte and the sorbent. C18 is the most widely used of these phases. EPA approved methods for analyzing organics in drinking water specify the C18 hydrophobic phase.

This method requires that large sample volumes (liters) be analyzed which utilizes the compound concentration function of the hydrophobic sorbent.

Polar or hydrophilic phases function by hydrogen bonding, pi-pi, and dipole-dipole interaction. Ion-exchange interactions occur between the sorbent and the analyte of opposite charge. ENVIRO-CLEAN® sorbents are available in either cation or anion exchangers exhibiting both weak and strong characteristics.

Copolymeric phases offer a new approach to the environmental analyst by providing very clean extracts and high compound recovery. Dual functionalities, hydrophobic plus ionexchange or polar allow a higher degree of selectivity than was previously possible. Analytes retained by multiple mechanisms can be washed by disrupting only one mechanism. Careful selection of the solvent strength results in a greater removal of chromatographic contamination.

SPE TERMINOLOGY

- **ACTIVATION** – a process of rinsing the sorbent with a solvent to clean the bed and extend the bonded pendant groups (i.e. C18) to maximize its effectiveness
- **A BED volume** is the quantity of solvent needed to cover the sorbent
- **CAPACITY** – The amount of analyte that a sorbent can retain
- **RETENTION** is the attraction a solid-phase has for the analyte to cause the analyte to “stick” on the sorbent
- **WASH SOLVENT** is solvent used to wash interferences off of the sorbent prior to elution
- **RETENTION** - is the attraction a solid-phase has for the analyte that causes the analyte to “adsorb” to the sorbent
- **ELUTION** is the process for removing an analyte from the sorbent and should require no more than 5 bed volumes of solvent
- **A SORBENT** is the solid-phase material to which analytes attach during the extraction process



ENVIRO-CLEAN® SOLID PHASE EXTRACTION CARTRIDGES

HOW TO READ ENVIRO-CLEAN® PART NUMBERS:

ENVIRO-CLEAN® CODE

E U EU: Unendcapped Cartridge EE: Endcapped Cartridge	B C X Sorbent Type*	1 5 3 Cartridge Size (mL) Packing Size (x 100mg) ("M" signifies x 1,000mg)
--	-------------------------------	--

EUBCX153:
ENVIRO-CLEAN® Unendcapped Benzenesulfonic Acid Cation Exchange Cartridge, Single Phase, 500mg/3mL.

SINGLE & DUAL PHASE
1: Cartridge contains given sorbent type.
2: Cartridge contains given sorbent type plus a hydrophobic phase.

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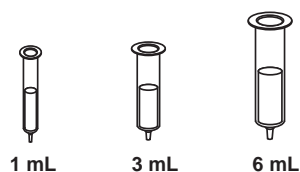
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*Sorbent Type

CODE	DESCRIPTION
C08, C18, C30	Carbon Chains
SIL	Unbonded Silica
PSA	n-2 Aminoethyl
BCX	Benzenesulfonic Acid Cation Exchanger
PCX	Propylsulfonic Acid Cation Exchanger
CCX	Carboxylic Acid Cation Exchanger
QAX	Quaternary Amine Anion Exchanger
NAX	Aminopropyl Anion Exchanger
FLS	Florisil® PR
ALA	Alumina - Acid
ALB	Alumina - Base
ALN	Alumina - Neutral
CNP	Cyanopropyl
CYH	Cyclohexyl
DOL	Diol
PHY	Phenyl



POLYMERIC RESINS FOR SOLID PHASE EXTRACTION



DBX - Benzenesulfonic Acid + C18		
PART NUMBER	AMT. SORBENT/ TUBE VOL.	UNITS
SSDBX031	30mg/1mL	100
SSDBX033	30mg/3mL	50
SSDBX056	50mg/6mL	50

DVB - Polystyrene Divinylbenzene		
PART NUMBER	AMT. SORBENT/ TUBE VOL.	UNITS
SSDVB031	30mg/1mL	100
SSDVB033	30mg/3mL	50
SSDVB056	50mg/6mL	50

BCX - Benzenesulfonic Acid		
PART NUMBER	AMT. SORBENT/ TUBE VOL.	UNITS
SSBCX031	30mg/1mL	100
SSBCX033	30mg/3mL	50
SSBCX056	50mg/6mL	50

C18 - Reverse Phase		
PART NUMBER	AMT. SORBENT/ TUBE VOL.	UNITS
SSC18031	30mg/1mL	100
SSC18033	30mg/3mL	50
SSC18056	50mg/6mL	50

QAX - Quaternary Amine		
PART NUMBER	AMT. SORBENT/ TUBE VOL.	UNITS
SSQAX031	30mg/1mL	100
SSQAX033	30mg/3mL	50
SSQAX056	50mg/6mL	50

CCXH - Carboxylic Acid (High-Flow)		
PART NUMBER	AMT. SORBENT/ TUBE VOL.	UNITS
SSCCXH031	30mg/1mL	100
SSCCXH033	30mg/3mL	50
SSCCXH056	50mg/6mL	50

% Organic Loading: 12.30

Application:

Dual functionality for weak acids and hydrophobic compounds.

% Organic Loading: N/A

Application: N/A

% Organic Loading: 11.00

Application:

Scavenger for amines, alcohols and other nucleophiles.

% Organic Loading: 21.70

Application:

Removes hydrophobic impurities, de-salting and purification of hydrophobic compounds.

% Organic Loading: 6.60

Application:

Removes large or more hydrophobic compounds.

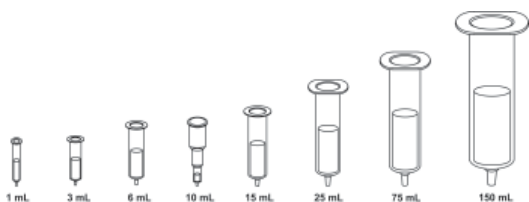
% Organic Loading: N/A

Application:

Removes large or more hydrophobic compounds.

ENVIRO-CLEAN® SOLID PHASE EXTRACTION CARTRIDGES

HYDROPHOBIC PRODUCT GUIDE



Sorbents are offered in the following particle sizes:

Small Particle (5-20 µm)
Intermediate Particle (20-40 µm)
Standard Particle (40-60 µm)
Large Particle (125-210 µm)

C8, Octyl

PART NUMBER UNENDCAPPED	PART NUMBER ENDCAPPED	AMT. SORBENT/TUBE VOL.	UNITS
EUC081L1	EEC081L1	50 mg/1 mL	100
EUC08111	EEC08111	100 mg/1 mL	100
EUC08123	EEC08123	200 mg/3 mL	50
EUC08153	EEC08153	500 mg/3 mL	50
EUC08156	EEC08156	500 mg/6 mL	50
EUC081M6	EEC081M6	1000 mg/6 mL	30
EUC0811Z	EEC0811Z	100 mg/10 mL	50
EUC0812Z	EEC0812Z	200 mg/10 mL	50
EUC0815Z	EEC0815Z	500 mg/10 mL	50
EUC0812M15	EEC0812M15	2000 mg/15 mL	20
EUC0815M25	EEC0815M25	5000 mg/25 mL	20
EUC08110M75	EEC08110M75	10,000 mg/75 mL	10

% Organic Loading: 15.70

Application:

Removes large or more hydrophobic compounds.

C18, Octadecyl

PART NUMBER UNENDCAPPED	PART NUMBER ENDCAPPED	AMT. SORBENT/TUBE VOL.	UNITS
EUC181L1	EEC181L1	50 mg/1 mL	100
EUC18111	EEC18111	100 mg/1 mL	100
EUC18123	EEC18123	200 mg/3 mL	50
EUC18153	EEC18153	500 mg/3 mL	50
EUC18156	EEC18156	500 mg/6 mL	50
EUC181M6	EEC181M6	1000 mg/6 mL	30
EUC1811Z	EEC1811Z	100 mg/10 mL	50
EUC1812Z	EEC1812Z	200 mg/10 mL	50
EUC1815Z	EEC1815Z	500 mg/10 mL	50
EUC1812M15	EEC1812M15	2000 mg/15 mL	20
EUC1815M25	EEC1815M25	5000 mg/25 mL	20
EUC18110M75	EEC18110M75	10,000 mg/75 mL	10

% Organic Loading: 21.70

Application:

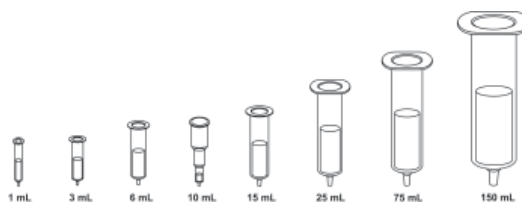
Optimized for non polar analytes, including pesticides, PCBs, PAHs, and formaldehyde.

ENVIRO-CLEAN® SOLID PHASE EXTRACTION CARTRIDGES

HYDROPHOBIC PRODUCT GUIDE

Sorbents are offered in the following particle sizes:

- Small Particle (5-20 µm)
- Intermediate Particle (20-40 µm)
- Standard Particle (40-60 µm)
- Large Particle (125-210 µm)



C30, Tricontyl			
PART NUMBER UNENDCAPPED	PART NUMBER ENDCAPPED	AMT. SORBENT/ TUBE VOL.	UNITS
EUC301L1	EEC301L1	50 mg/1 mL	100
EUC30111	EEC30111	100 mg/1 mL	100
EUC30123	EEC30123	200 mg/3 mL	50
EUC30153	EEC30153	500 mg/3 mL	50
EUC30156	EEC30156	500 mg/6 mL	50
EUC301M6	EEC301M6	1000 mg/6 mL	30
EUC3011Z	EEC3011Z	100 mg/10 mL	50
EUC3012Z	EEC3012Z	200 mg/10 mL	50
EUC3015Z	EEC3015Z	500 mg/10 mL	50

% Organic Loading: 26.00

Application:

Removes smallest or least hydrophobic compounds.

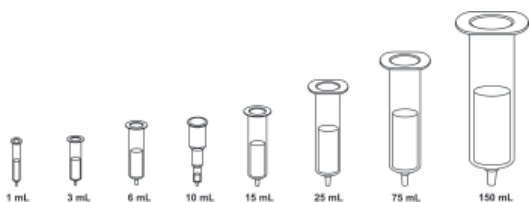


ENVIRO C18



ENVIRO-CLEAN® SOLID PHASE EXTRACTION CARTRIDGES

HYDROPHOBIC PRODUCT GUIDE



Sorbents are offered in the following particle sizes:

Small Particle (5-20 µm)
Intermediate Particle (20-40 µm)
Standard Particle (40-60 µm)
Large Particle (125-210 µm)

Cyclohexyl			
PART NUMBER UNENDCAPPED	PART NUMBER ENDCAPPED	AMT. SORBENT/ TUBE VOL.	UNITS
EUCYH1L1	EECYH1L1	50 mg/1 mL	100
EUCYH111	EECYH111	100 mg/1 mL	100
EUCYH123	EECYH123	200 mg/3 mL	50
EUCYH153	EECYH153	500 mg/3 mL	50
EUCYH156	EECYH156	500 mg/6 mL	50
EUCYH1M6	EECYH1M6	1000 mg/6 mL	30
EUCYH11Z	EECYH11Z	100 mg/10 mL	50
EUCYH12Z	EECYH12Z	200 mg/10 mL	50
EUCYH15Z	EECYH15Z	500 mg/10 mL	50
EUCYH12M15	EECYH12M15	2000 mg/15 mL	20
EUCYH15M25	EECYH15M25	5000 mg/25 mL	20

% Organic Loading: 11.60

Application:

Scavenger for phenolic compounds.

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Phenyl			
PART NUMBER UNENDCAPPED	PART NUMBER ENDCAPPED	AMT. SORBENT/ TUBE VOL.	UNITS
EUPHY1L1	EPEHY1L1	50 mg/1 mL	100
EUPHY111	EPEHY111	100 mg/1 mL	100
EUPHY123	EPEHY123	200 mg/3 mL	50
EUPHY153	EPEHY153	500 mg/3 mL	50
EUPHY156	EPEHY156	500 mg/6 mL	50
EUPHY1M6	EPEHY1M6	1000 mg/6 mL	30
EUPHY11Z	EPEHY11Z	100 mg/10 mL	50
EUPHY12Z	EPEHY12Z	200 mg/10 mL	50
EUPHY15Z	EPEHY15Z	500 mg/10 mL	50
EUPHY12M15	EPEHY12M15	2000 mg/15 mL	20
EUPHY15M25	EPEHY15M25	5000 mg/25 mL	20

% Organic Loading: 11.00

Application:

Scavenger for polar compounds.



ENVIRO CLEAN® EUFLSA1M6

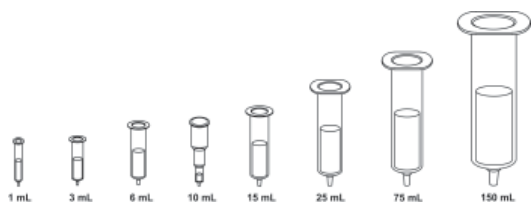
UCT hydrophilic sorbents provide unmatched activity for the extraction of polar compounds. The analyst can choose from a wide range of cartridge sizes, sorbent types and quantities tailored to the specific requirements of each analysis.

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ENVIRO-CLEAN® SOLID PHASE EXTRACTION CARTRIDGES

HYDROPHILIC PRODUCT GUIDE



Sorbents are offered in the following particle sizes:

Small Particle (5-20 µm)
Intermediate Particle (20-40 µm)
Standard Particle (40-60 µm)
Large Particle (125-210 µm)

Florisol® PR			
PART NUMBER UNENDCAPPED	PART NUMBER ENDCAPPED	AMT. SORBENT/TUBE VOL.	UNITS
EUFLS1L1	—	50 mg/1 mL	100
EUFLS111	—	100 mg/1 mL	100
EUFLS123	—	200 mg/3 mL	50
EUFLS153	—	500 mg/3 mL	50
EUFLS156	—	500 mg/6 mL	50
EUFLS1M6	—	1000 mg/6 mL	30
EUFLS11Z	—	100 mg/10 mL	50
EUFLS12Z	—	200 mg/10 mL	50
EUFLS15Z	—	500 mg/10 mL	50
EUFLS12M15	—	2000 mg/15 mL	20
EUFLS15M25	—	5000 mg/25 mL	20
EUFLS110M75	—	10,000 mg/75 mL	10

% Organic Loading: N/A

Application:

Removes polar type compounds.

Florisol® is a registered trademark of U.S. Silica

Alumina Acid			
PART NUMBER UNENDCAPPED	PART NUMBER ENDCAPPED	AMT. SORBENT/TUBE VOL.	UNITS
EUALA1L1	—	50 mg/1 mL	100
EUALA11	—	100 mg/1 mL	100
EUALA123	—	200 mg/3 mL	50
EUALA153	—	500 mg/3 mL	50
EUALA156	—	500 mg/6 mL	50
EUALA1M6	—	1000 mg/6 mL	30
EUALA11Z	—	100 mg/10 mL	50
EUALA12Z	—	200 mg/10 mL	50
EUALA15Z	—	500 mg/10 mL	50
EUALA12M15	—	2000 mg/15 mL	20
EUALA15M25	—	5000 mg/25 mL	20
EUALA110M75	—	10,000 mg/75 mL	10

% Organic Loading: N/A

Application:

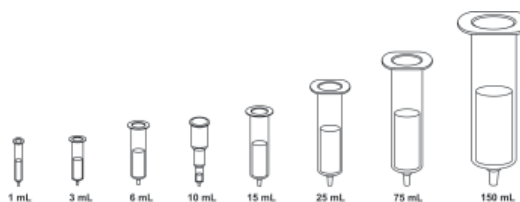
Removes polar type compounds.

ENVIRO-CLEAN® SOLID PHASE EXTRACTION CARTRIDGES

HYDROPHILIC PRODUCT GUIDE

Sorbents are offered in the following particle sizes:

Small Particle (5-20 µm)
Intermediate Particle (20-40 µm)
Standard Particle (40-60 µm)
Large Particle (125-210 µm)



Alumina Base			
PART NUMBER UNENDCAPPED	PART NUMBER ENDCAPPED	AMT. SORBENT/TUBE VOL.	UNITS
EUALB1L1	–	50 mg/1 mL	100
EUALB111	–	100 mg/1 mL	100
EUALB123	–	200 mg/3 mL	50
EUALB153	–	500 mg/3 mL	50
EUALB156	–	500 mg/6 mL	50
EUALB1M6	–	1000 mg/6 mL	30
EUALB11Z	–	100 mg/10 mL	50
EUALB12Z	–	200 mg/10 mL	50
EUALB15Z	–	500 mg/10 mL	50
EUALB12M15	–	2000 mg/15 mL	20
EUALB15M25	–	5000 mg/25 mL	20
EUALB110M75	–	10,000 mg/75 mL	10

% Organic Loading: N/A

Application:

Removes polar type compounds.

Alumina Neutral			
PART NUMBER UNENDCAPPED	PART NUMBER ENDCAPPED	AMT. SORBENT/TUBE VOL.	UNITS
EUALN1L1	–	50 mg/1 mL	100
EUALN111	–	100 mg/1 mL	100
EUALN123	–	200 mg/3 mL	50
EUALN153	–	500 mg/3 mL	50
EUALN156	–	500 mg/6 mL	50
EUALN1M6	–	1000 mg/6 mL	30
EUALN11Z	–	100 mg/10 mL	50
EUALN12Z	–	200 mg/10 mL	50
EUALN15Z	–	500 mg/10 mL	50
EUALN12M15	–	2000 mg/15 mL	20
EUALN15M25	–	5000 mg/25 mL	20
EUALN110M75	–	10,000 mg/75 mL	10

% Organic Loading: N/A

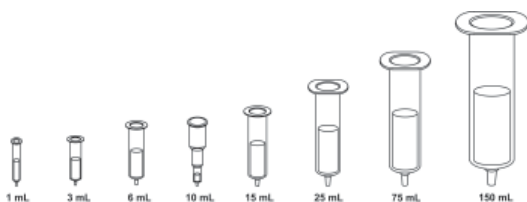
Application:

Removes polar type compounds.



ENVIRO-CLEAN® SOLID PHASE EXTRACTION CARTRIDGES

HYDROPHILIC PRODUCT GUIDE



Sorbents are offered in the following particle sizes:

Small Particle (5-20 μm)
 Intermediate Particle (20-40 μm)
 Standard Particle (40-60 μm)
 Large Particle (125-210 μm)

CN, Cyanopropyl

PART NUMBER UNENDCAPPED	PART NUMBER ENDCAPPED	AMT. SORBENT/TUBE VOL.	UNITS
EUCNP1L1	EECNP1L1	50 mg/1 mL	100
EUCNP111	EECNP111	100 mg/1 mL	100
EUCNP123	EECNP123	200 mg/3 mL	50
EUCNP153	EECNP153	500 mg/3 mL	50
EUCNP156	EECNP156	500 mg/6 mL	50
EUCNP1M6	EECNP1M6	1000 mg/6 mL	30
EUCNP11Z	EECNP11Z	100 mg/10 mL	50
EUCNP12Z	EECNP12Z	200 mg/10 mL	50
EUCNP15Z	EECNP15Z	500 mg/10 mL	50
EUCNP12M15	EECNP12M15	2000 mg/15 mL	20
EUCNP15M25	EECNP15M25	5000 mg/25 mL	20
EUCNP110M75	EECNP110M75	10,000 mg/75 mL	10

% Organic Loading: 6.90

Application:

Removes steroid type compounds.

Diol

PART NUMBER UNENDCAPPED	PART NUMBER ENDCAPPED	AMT. SORBENT/TUBE VOL.	UNITS
EUDOL1L1	–	50 mg/1 mL	100
EUDOL111	–	100 mg/1 mL	100
EUDOL123	–	200 mg/3 mL	50
EUDOL153	–	500 mg/3 mL	50
EUDOL156	–	500 mg/6 mL	50
EUDOL1M6	–	1000 mg/6 mL	30
EUDOL11Z	–	100 mg/10 mL	50
EUDOL12Z	–	200 mg/10 mL	50
EUDOL15Z	–	500 mg/10 mL	50
EUDOL12M15	–	2000 mg/15 mL	20
EUDOL15M25	–	5000 mg/25 mL	20
EUDOL110M75	–	10,000 mg/75 mL	10

% Organic Loading: 8.00

Application:

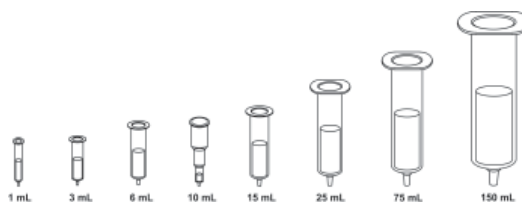
Removes hydrophilic (polar) impurities, purification of hydrophilic (polar) compounds.

ENVIRO-CLEAN® SOLID PHASE EXTRACTION CARTRIDGES

HYDROPHILIC PRODUCT GUIDE

Sorbents are offered in the following particle sizes:

Small Particle (5-20 µm)
Intermediate Particle (20-40 µm)
Standard Particle (40-60 µm)
Large Particle (125-210 µm)



Unbonded Silica (Acid Washed)			
PART NUMBER UNENDCAPPED	PART NUMBER ENDCAPPED	AMT. SORBENT/TUBE VOL.	UNITS
EUSIL1L1	–	50 mg/1 mL	20 x 5
EUSIL111	–	100 mg/1 mL	20 x 5
EUSIL123	–	200 mg/3 mL	10 x 5
EUSIL153	–	500 mg/3 mL	10 x 5
EUSIL156	–	500 mg/6 mL	10 x 5
EUSIL1M6	–	1000 mg/6 mL	6 x 5
EUSIL11Z	–	100 mg/10 mL	10 x 5
EUSIL12Z	–	200 mg/10 mL	10 x 5
EUSIL15Z	–	500 mg/10 mL	10 x 5
EUSIL12M15	–	2000 mg/15 mL	4 x 5
EUSIL15M25	–	5000 mg/25 mL	4 x 5
EUSIL110M75	–	10,000 mg/75 mL	2 x 5

% Organic Loading: N/A

Application:

Removes hydrophilic (polar) impurities, purification of hydrophilic (polar) compounds.

High-Surface Activity Silica			
PART NUMBER UNENDCAPPED	PART NUMBER ENDCAPPED	AMT. SORBENT/TUBE VOL.	UNITS
EPHSIL1L1	–	50 mg/1 mL	20 x 5
EPHSIL111	–	100 mg/1 mL	20 x 5
EPHSIL123	–	200 mg/3 mL	10 x 5
EPHSIL153	–	500 mg/3 mL	10 x 5
EPHSIL156	–	500 mg/6 mL	10 x 5
EPHSIL1M6	–	1000 mg/6 mL	6 x 5
EPHSIL11Z	–	100 mg/10 mL	10 x 5
EPHSIL12Z	–	200 mg/10 mL	10 x 5
EPHSIL15Z	–	500 mg/10 mL	10 x 5
EPHSIL12M15	–	2000 mg/15 mL	4 x 5
EPHSIL15M25	–	5000 mg/25 mL	4 x 5
EPHSIL110M75	–	10,000 mg/75 mL	2 x 5

% Organic Loading: N/A

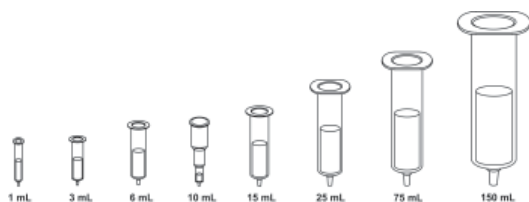
Application:

Removes hydrophilic (polar) impurities, purification of hydrophilic (polar) compounds.



ENVIRO-CLEAN® SOLID PHASE EXTRACTION CARTRIDGES

HYDROPHILIC PRODUCT GUIDE



Sorbents are offered in the following particle sizes:

Small Particle (5-20 μm)
 Intermediate Particle (20-40 μm)
 Standard Particle (40-60 μm)
 Large Particle (125-210 μm)

Carbon - Graphitized, Non-Porous, 120/400 Mesh

PART NUMBER UNENDCAPPED	PART NUMBER ENDCAPPED	AMT. SORBENT/TUBE VOL.	UNITS
EUCARB1L1	—	50 mg/1 mL	100
EUCARB111	—	100 mg/1 mL	100
EUCARB123	—	200 mg/3 mL	50
EUCARB153	—	500 mg/3 mL	50
EUCARB126	—	200 mg/6 mL	50
EUCARB156	—	500 mg/6 mL	50
EUCARB1M6	—	1000 mg/6 mL	30
EUCARB11Z	—	100 mg/10 mL	50
EUCARB12Z	—	200 mg/10 mL	50
EUCARB15Z	—	500 mg/10 mL	50
EUCARB1M15	—	1000 mg/15 mL	20
EUCARB12M15	—	2000 mg/15 mL	20

CLEAN-UP® Carbon

Carbon supports have been used to isolate extremely polar organic compounds. They work by an adsorption mechanism with a high surface area and ion exchange. This interaction can happen in a wide range of polar and non-polar solvents.

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SPE FACTS

- When choosing a sorbent the RETENTION of analyte should be strong enough so that 20 BED volumes of WASH solvent will not elute the analyte
- CAPACITY of bonded silicas can range from 1% to 15% depending upon analyte
- pKa is the pH at which 50% of the analyte is ionic and 50% is neutral
- RETENTION of analytes by POLAR interactions is aided by NON-POLAR solvents
- RETENTION of analytes by ION-EXCHANGE sorbent is aided by:
 - o Solvent/matrix pH should be between the pKa of the analyte and sorbent
 - o Solvent/matrix ionic strength must be low
 - o Sorbent should be equilibrated with LOW selectivity counter-ion
- ELUTION of analytes from ION-EXCHANGE sorbent is aided by:
 - o Solvent/matrix pH ABOVE the pKa of CATION or below ANION
 - o Solvent/matrix ionic strength HIGH
 - o Solvent/matrix contains HIGH selectivity counter-ions (SeeTable1)
- Solvent ACTIVATION of the solid-phase is necessary for the proper interaction of the sorbent with the analyte
- ELUTION of analytes from POLAR sorbents is aided by POLAR solvents



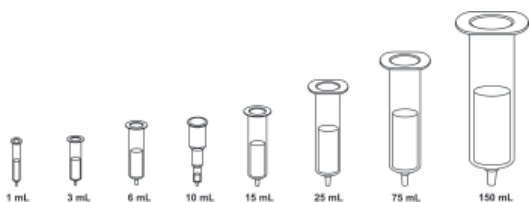
STYRE-SCREEN® DBX



UCT Styre-Screen® anion exchange and cation exchange polymeric sorbents are available with a variety of standard counter-ions. Cartridges are ready to use which means that time consuming exchange reactions can be eliminated reducing valuable laboratory preparation time. With a wide range of sizes, sorbent types and quantities, cartridges are available for every analytical requirement.

ENVIRO-CLEAN® SOLID PHASE EXTRACTION CARTRIDGES

ANION EXCHANGE PRODUCT GUIDE



Sorbents are offered in the following particle sizes:

Small Particle (5-20 μm)
 Intermediate Particle (20-40 μm)
 Standard Particle (40-60 μm)
 Large Particle (125-210 μm)

Aminopropyl			
PART NUMBER UNENDCAPPED	PART NUMBER ENDCAPPED	AMT. SORBENT/TUBE VOL.	UNITS
EUNAX1L1	—	50 mg/1 mL	100
EUNAX111	—	100 mg/1 mL	100
EUNAX123	—	200 mg/3 mL	50
EUNAX153	—	500 mg/3 mL	50
EUNAX156	—	500 mg/6 mL	50
EUNAX1M6	—	1000 mg/6 mL	30
EUNAX11Z	—	100 mg/10 mL	50
EUNAX12Z	—	200 mg/10 mL	50
EUNAX15Z	—	500 mg/10 mL	50
EUNAX12M15	—	2000 mg/15 mL	20
EUNAX15M25	—	5000 mg/25 mL	10
EUNAX110M75	—	10,000 mg/75 mL	10

% Organic Loading: 21.70

Application:

Removes hydrophobic impurities, de-salting and purification of hydrophobic compounds.

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Quaternary Amine with Chloride Counter Ion			
PART NUMBER UNENDCAPPED	PART NUMBER ENDCAPPED	AMT. SORBENT/TUBE VOL.	UNITS
EUQAX1L1	—	50 mg/1 mL	100
EUQAX111	—	100 mg/1 mL	100
EUQAX123	—	200 mg/3 mL	50
EUQAX153	—	500 mg/3 mL	50
EUQAX156	—	500 mg/6 mL	50
EUQAX1M6	—	1000 mg/6 mL	30
EUQAX11Z	—	100 mg/10 mL	50
EUQAX12Z	—	200 mg/10 mL	50
EUQAX15Z	—	500 mg/10 mL	50
EUQAX12M15	—	2000 mg/15 mL	20
EUQAX15M25	—	5000 mg/25 mL	20
EUQAX110M75	—	10,000 mg/75 mL	10

% Organic Loading: 8.40

Application:

Scavenger for acids and sulfonyle chlorides, isocyanates and weak electrophiles.

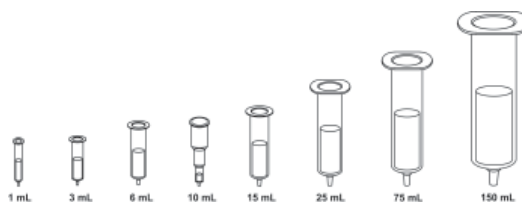


ENVIRO-CLEAN® SOLID PHASE EXTRACTION CARTRIDGES

ANION EXCHANGE PRODUCT GUIDE

Sorbents are offered in the following particle sizes:

Small Particle (5-20 µm)
 Intermediate Particle (20-40 µm)
 Standard Particle (40-60 µm)
 Large Particle (125-210 µm)



Quaternary Amine with Acetate Counter Ion			
PART NUMBER UNENDCAPPED	PART NUMBER ENDCAPPED	AMT. SORBENT/TUBE VOL.	UNITS
EAQAX111	–	100 mg/1 mL	100
EAQAX123	–	200 mg/3 mL	50
EAQAX153	–	500 mg/3 mL	50
EAQAX156	–	500 mg/6 mL	50
EAQAX1M6	–	1000 mg/6 mL	30
EAQAX11Z	–	100 mg/10 mL	50
EAQAX12Z	–	200 mg/10 mL	50
EAQAX15Z	–	500 mg/10 mL	50
EAQAX12M15	–	2000 mg/15 mL	20
EAQAX15M25	–	5000 mg/25 mL	20
EAQAX110M75	–	10,000 mg/75 mL	10

% Organic Loading: 8.40

Application:

Scavenger for acids and sulfonyl chlorides, isocyanates and weak electrophiles. Useful when charge on ion being removed is weaker than the acetate counter ion.

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Quaternary Amine with Hydroxide Counter Ion			
PART NUMBER UNENDCAPPED	PART NUMBER ENDCAPPED	AMT. SORBENT/TUBE VOL.	UNITS
EHQAX111	–	50 mg/1 mL	100
EHQAX123	–	100 mg/1 mL	100
EHQAX153	–	200 mg/3 mL	50
EHQAX156	–	500 mg/3 mL	50
EHQAX1M6	–	500 mg/6 mL	50
EHQAX11Z	–	1000 mg/6 mL	30
EHQAX12Z	–	100 mg/10 mL	50
EHQAX15Z	–	200 mg/10 mL	50
EHQAX12M15	–	500 mg/10 mL	50
EHQAX15M25	–	2000 mg/15 mL	20
EHQAX110M75	–	5000 mg/25 mL	10
EUNAX110M75	–	10,000 mg/75 mL	10

% Organic Loading: 8.40

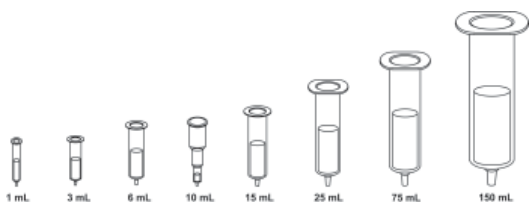
Application:

Scavenger for acids and sulfonyl chlorides, isocyanates and weak electrophiles. Useful when charge on ion being removed is weaker than the hydroxide counter ion.



ENVIRO-CLEAN® SOLID PHASE EXTRACTION CARTRIDGES

ANION EXCHANGE PRODUCT GUIDE



Sorbents are offered in the following particle sizes:

Small Particle (5-20 μm)
Intermediate Particle (20-40 μm)
Standard Particle (40-60 μm)
Large Particle (125-210 μm)

Quaternary Amine with Formate Counter Ion

PART NUMBER UNENDCAPPED	PART NUMBER ENDCAPPED	AMT. SORBENT/TUBE VOL.	UNITS
EFQAX1L1	—	50 mg/1 mL	100
EFQAX111	—	100 mg/1 mL	100
EFQAX123	—	200 mg/3 mL	50
EFQAX153	—	500 mg/3 mL	50
EFQAX156	—	500 mg/6 mL	50
EFQAX1M6	—	1000 mg/6 mL	30
EFQAX11Z	—	100 mg/10 mL	50
EFQAX12Z	—	200 mg/10 mL	50
EFQAX15Z	—	500 mg/10 mL	50
EFQAX12M15	—	2000 mg/15 mL	20
EFQAX15M25	—	5000 mg/25 mL	20
EFQAX110M75	—	10,000 mg/75 mL	10

% Organic Loading: 8.40

Application:

Scavenger for acids and sulfonyl chlorides, isocyanates and weak electrophiles. Useful when charge on ion being removed is weaker than the formate counter ion.

Polyimine

PART NUMBER UNENDCAPPED	PART NUMBER ENDCAPPED	AMT. SORBENT/TUBE VOL.	UNITS
EUPAX11	—	50 mg/1 mL	100
EUPAX111	—	100 mg/1 mL	100
EUPAX123	—	200 mg/3 mL	50
EUPAX153	—	500 mg/3 mL	50
EUPAX156	—	500 mg/6 mL	50
EUPAX1M6	—	1000 mg/6 mL	30
EUPAX11Z	—	100 mg/10 mL	50
EUPAX12Z	—	200 mg/10 mL	50
EUPAX15Z	—	500 mg/10 mL	50
EUPAX12M15	—	2000 mg/15 mL	20
EUPAX15M25	—	5000 mg/25 mL	20
EUPAX110M75	—	10,000 mg/75 mL	10

% Organic Loading: 13.50

Application:

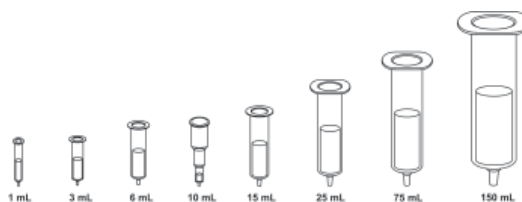
Removes hydrophobic impurities, de-salting and purification of hydrophobic compounds.

ENVIRO-CLEAN® SOLID PHASE EXTRACTION CARTRIDGES

ANION EXCHANGE PRODUCT GUIDE

Sorbents are offered in the following particle sizes:

Small Particle (5-20 µm)
 Intermediate Particle (20-40 µm)
 Standard Particle (40-60 µm)
 Large Particle (125-210 µm)



PSA (n-2, Aminoethyl)			
PART NUMBER UNENDCAPPED	PART NUMBER ENDCAPPED	AMT. SORBENT/ TUBE VOL.	UNITS
EUPSA1L1	—	50 mg/1 mL	100
EUPSA111	—	100 mg/1 mL	100
EUPSA123	—	200 mg/3 mL	50
EUPSA153	—	500 mg/3 mL	50
EUPSA156	—	500 mg/6 mL	50
EUPSA1M6	—	1000 mg/6 mL	30
EUPSA11Z	—	100 mg/10 mL	50
EUPSA12Z	—	200 mg/10 mL	50
EUPSA15Z	—	500 mg/10 mL	50
EUPSA12M15	—	2000 mg/15 mL	20
EUPSA15M25	—	5000 mg/25 mL	20
EUPSA110M75	—	10,000 mg/75 mL	10

% Organic Loading: 11.00

Application:

Scavenger for acids, cyclic compounds, cholesterol, and other lipid type compounds.

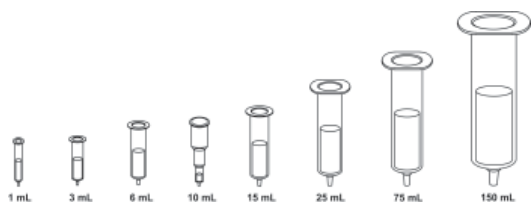
FACTS

- Polynuclear aromatic hydrocarbons (PAH's) are residual products from the incomplete combustion of fuels
- Almost any compound can be extracted using SPE
- Carbon used for solid-phase extraction may be in either of two forms, ACTIVATED or GRAPHITIZED



ENVIRO-CLEAN® SOLID PHASE EXTRACTION CARTRIDGES

CATION EXCHANGE PRODUCT GUIDE



Sorbents are offered in the following particle sizes:

Small Particle (5-20 µm)
Intermediate Particle (20-40 µm)
Standard Particle (40-60 µm)
Large Particle (125-210 µm)

Carboxylic Acid			
PART NUMBER UNENDCAPPED	PART NUMBER ENDCAPPED	AMT. SORBENT/TUBE VOL.	UNITS
EUCCX1L1	—	50 mg/1 mL	100
EUCCX111	—	100 mg/1 mL	100
EUCCX123	—	200 mg/3 mL	50
EUCCX153	—	500 mg/3 mL	50
EUCCX156	—	500 mg/6 mL	50
EUCCX1M6	—	1000 mg/6 mL	30
EUCCX11Z	—	100 mg/10 mL	50
EUCCX12Z	—	200 mg/10 mL	50
EUCCX15Z	—	500 mg/10 mL	50
EUCCX12M15	—	2000 mg/15 mL	20
EUCCX15M25	—	5000 mg/25 mL	10
EUCCX110M75	—	10,000 mg/75 mL	10

% Organic Loading: 9.10

Application:

Scavenger for strong amines with quaternary amines.

Propylsulfonic Acid			
PART NUMBER UNENDCAPPED	PART NUMBER ENDCAPPED	AMT. SORBENT/TUBE VOL.	UNITS
EUPCX1L1	—	50 mg/1 mL	100
EUPCX111	—	100 mg/1 mL	100
EUPCX123	—	200 mg/3 mL	50
EUPCX153	—	500 mg/3 mL	50
EUPCX156	—	500 mg/6 mL	50
EUPCX1M6	—	1000 mg/6 mL	30
EUPCX11Z	—	100 mg/10 mL	50
EUPCX12Z	—	200 mg/10 mL	50
EUPCX15Z	—	500 mg/10 mL	50
EUPCX12M15	—	2000 mg/15 mL	20
EUPCX15M25	—	5000 mg/25 mL	20
EUPCX110M75	—	10,000 mg/75 mL	10

% Organic Loading: 7.10

Application:

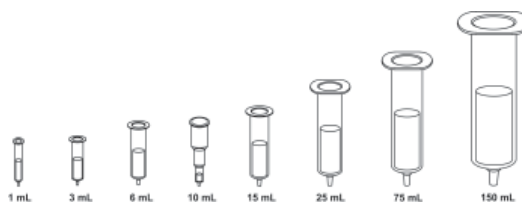
Scavenger for amines, alcohols and other nucleophiles.

ENVIRO-CLEAN® SOLID PHASE EXTRACTION CARTRIDGES

CATION EXCHANGE PRODUCT GUIDE

Sorbents are offered in the following particle sizes:

Small Particle (5-20 µm)
Intermediate Particle (20-40 µm)
Standard Particle (40-60 µm)
Large Particle (125-210 µm)



Benzenesulfonic Acid			
PART NUMBER UNENCAPPED	PART NUMBER ENDCAPPED	AMT. SORBENT/ TUBE VOL.	UNITS
EUBCX1L1	–	50 mg/1 mL	100
EUBCX111	–	100 mg/1 mL	100
EUBCX123	–	200 mg/3 mL	50
EUBCX153	–	500 mg/3 mL	50
EUBCX156	–	500 mg/6 mL	50
EUBCX1M6	–	1000 mg/6 mL	30
EUBCX11Z	–	100 mg/10 mL	50
EUBCX12Z	–	200 mg/10 mL	50
EUBCX15Z	–	500 mg/10 mL	50
EUBCX12M15	–	2000 mg/15 mL	20
EUBCX15M25	–	5000 mg/25 mL	20
EUBCX110M75	–	10,000 mg/75 mL	10

% Organic Loading: 11.00

Application:

Scavenger for amines, alcohols and other nucleophiles.

Benzenesulfonic Acid – High Load			
PART NUMBER UNENCAPPED	PART NUMBER ENDCAPPED	AMT. SORBENT/ TUBE VOL.	UNITS
EUBCX1HL11	–	100 mg/1 mL	100
EUBCX1HL23	–	200 mg/3 mL	50
EUBCX1HL53	–	500 mg/3 mL	50
EUBCX1HL56	–	500 mg/6 mL	50
EUBCX1HLM6	–	1000 mg/6 mL	30
EUBCX1HL1Z	–	100 mg/10 mL	50
EUBCX1HL2Z	–	200 mg/10 mL	50
EUBCX1HL5Z	–	500 mg/10 mL	50
EUBCX1HL2M15	–	2000 mg/15 mL	20
EUBCX1HL5M25	–	5000 mg/25 mL	20
EUBCX1HL10M75	–	10,000 mg/75 mL	10

% Organic Loading: 15.00

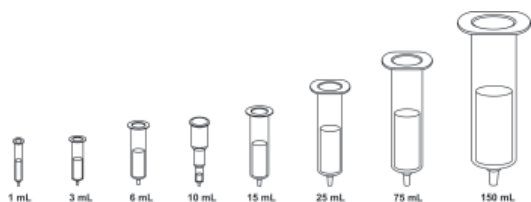
Application:

Scavenger for amines, alcohols and other nucleophiles.



ENVIRO-CLEAN® SOLID PHASE EXTRACTION CARTRIDGES

CATION EXCHANGE PRODUCT GUIDE



Sorbents are offered in the following particle sizes:

Small Particle (5-20 μm)
 Intermediate Particle (20-40 μm)
 Standard Particle (40-60 μm)
 Large Particle (125-210 μm)

Triacetic Acid			
PART NUMBER UNENDCAPPED	PART NUMBER ENDCAPPED	AMT. SORBENT/TUBE VOL.	UNITS
EUTAX1L1	—	50 mg/1 mL	100
EUTAX111	—	100 mg/1 mL	100
EUTAX123	—	200 mg/3 mL	50
EUTAX153	—	500 mg/3 mL	50
EUTAX156	—	500 mg/6 mL	50
EUTAX1M6	—	1000 mg/6 mL	30
EUTAX11Z	—	100 mg/10 mL	50
EUTAX12Z	—	200 mg/10 mL	50
EUTAX15Z	—	500 mg/10 mL	50
EUTAX12M15	—	2000 mg/15 mL	20
EUTAX15M25	—	5000 mg/25 mL	20
EUTAX110M75	—	10,000 mg/75 mL	10

% Organic Loading: 7.61

Application:

Chelator for metal ions.

i.e. tin
 palladium
 copper
 ruthenium
 chromium
 nickel

EXTRACTION AND TROUBLESHOOTING TIPS

Common SPE Errors:

- Sample extracted too rapidly—remedy, reduce vacuum setting
- Testing the pH of water with pH paper—remedy, use pH meter
- Over drying of the extract—remedy, reduce time in evaporator or N2 flow and temperature of bath
- Over drying of the sorbent in the cartridge after extraction—remedy, reduce vacuum setting or dry time

ENVIRO-CLEAN®

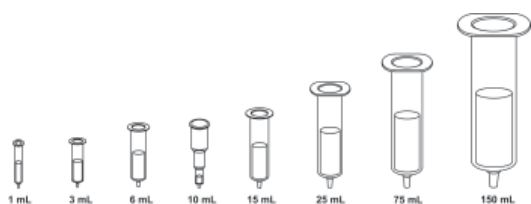
EUBCX1HL2Z

UCT Enviro-Clean® ion exchange sorbents are manufactured with a unique bonding technology that renders our sorbents resistant to extreme pH. These UCT products are available in a wide range of sizes, sorbent types and quantities to fill any ion exchange requirement.



ENVIRO-CLEAN® SOLID PHASE EXTRACTION CARTRIDGES

COPOLYMERIC PRODUCT GUIDE



Sorbents are offered in the following particle sizes:

Small Particle (5-20 μm)
 Intermediate Particle (20-40 μm)
 Standard Particle (40-60 μm)
 Large Particle (125-210 μm)

Hydrophobic Plus Cyclohexyl

PART NUMBER UNENDCAPPED	PART NUMBER ENDCAPPED	AMT. SORBENT/TUBE VOL.	UNITS
EUCYH211	—	100 mg/1 mL	100
EUCYH223	—	200 mg/3 mL	50
EUCYH253	—	500 mg/3 mL	50
EUCYH256	—	500 mg/6 mL	50
EUCYH2M6	—	1000 mg/6 mL	30
EUCYH21Z	—	100 mg/10 mL	50
EUCYH22Z	—	200 mg/10 mL	50
EUCYH25Z	—	500 mg/10 mL	50
EUCYH22M15	—	2000 mg/15 mL	20
EUCYH25M25	—	5000 mg/25 mL	20
EUCYH210M75	—	10,000 mg/75 mL	10

% Organic Loading: 11.00

Application:

Dual functionality for phenols and hydrophobic compounds.

Hydrophobic Plus Cyanopropyl

PART NUMBER UNENDCAPPED	PART NUMBER ENDCAPPED	AMT. SORBENT/TUBE VOL.	UNITS
EUCNP211	—	100 mg/1 mL	100
EUCNP223	—	200 mg/3 mL	50
EUCNP253	—	500 mg/3 mL	50
EUCNP256	—	500 mg/6 mL	50
EUCNP2M6	—	1000 mg/6 mL	30
EUCNP21Z	—	100 mg/10 mL	50
EUCNP22Z	—	200 mg/10 mL	50
EUCNP25Z	—	500 mg/10 mL	50
EUCNP22M15	—	2000 mg/15 mL	20
EUCNP25M25	—	5000 mg/25 mL	20
EUCNP210M75	—	10,000 mg/75 mL	10

% Organic Loading: 14.60

Application:

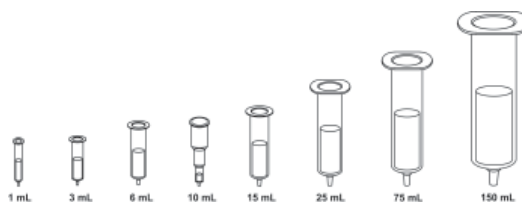
Dual functionality for polar and hydrophobic compounds.

ENVIRO-CLEAN® SOLID PHASE EXTRACTION CARTRIDGES

COPOLYMERIC PRODUCT GUIDE

Sorbents are offered in the following particle sizes:

Small Particle (5-20 µm)
Intermediate Particle (20-40 µm)
Standard Particle (40-60 µm)
Large Particle (125-210 µm)



Hydrophobic Plus Propylsulfonic Acid			
PART NUMBER UNENDCAPPED	PART NUMBER ENDCAPPED	AMT. SORBENT/TUBE VOL.	UNITS
EUPCX2L1	–	50 mg/1 mL	100
EUPCX211	–	100 mg/1 mL	100
EUPCX223	–	200 mg/3 mL	50
EUPCX253	–	500 mg/3 mL	50
EUPCX256	–	500 mg/6 mL	50
EUPCX2M6	–	1000 mg/6 mL	30
EUPCX21Z	–	100 mg/10 mL	50
EUPCX22Z	–	200 mg/10 mL	50
EUPCX25Z	–	500 mg/10 mL	50
EUPCX22M15	–	2000 mg/15 mL	20
EUPCX25M25	–	5000 mg/25 mL	20
EUPCX210M75	–	10,000 mg/75 mL	10

% Organic Loading: 14.62

Application:

Dual functionality for weak bases and hydrophobic compounds.

Hydrophobic Plus Carboxylic Acid			
PART NUMBER UNENDCAPPED	PART NUMBER ENDCAPPED	AMT. SORBENT/TUBE VOL.	UNITS
EUCCX2L1	–	50 mg/1 mL	100
EUCCX211	–	100 mg/1 mL	100
EUCCX223	–	200 mg/3 mL	50
EUCCX253	–	500 mg/3 mL	50
EUCCX256	–	500 mg/6 mL	50
EUCCX2M6	–	1000 mg/6 mL	30
EUCCX21Z	–	100 mg/10 mL	50
EUCCX22Z	–	200 mg/10 mL	50
EUCCX25Z	–	500 mg/10 mL	50
EUCCX22M15	–	2000 mg/15 mL	20
EUCCX25M25	–	5000 mg/25 mL	20
EUCCX210M75	–	1,0000 mg/75 mL	10

% Organic Loading: 12.50

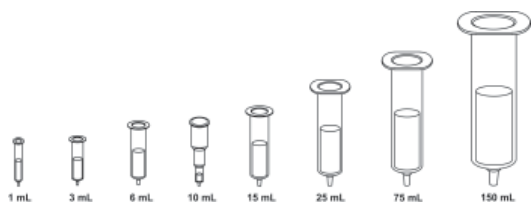
Application:

Dual functionality for strong bases and hydrophobic compounds.



ENVIRO-CLEAN® SOLID PHASE EXTRACTION CARTRIDGES

COPOLYMERIC PRODUCT GUIDE



Sorbents are offered in the following particle sizes:

Small Particle (5-20 µm)
Intermediate Particle (20-40 µm)
Standard Particle (40-60 µm)
Large Particle (125-210 µm)

Hydrophobic Plus Benzenesulfonic Acid

PART NUMBER UNENDCAPPED	PART NUMBER ENDCAPPED	AMT. SORBENT/ TUBE VOL.	UNITS
EUBCX2L1	—	50 mg/1 mL	100
EUBCX211	—	100 mg/1 mL	100
EUBCX223	—	200 mg/3 mL	50
EUBCX253	—	500 mg/3 mL	50
EUBCX256	—	500 mg/6 mL	50
EUBCX2M6	—	1000 mg/6 mL	30
EUBCX21Z	—	100 mg/10 mL	50
EUBCX22Z	—	200 mg/10 mL	50
EUBCX25Z	—	500 mg/10 mL	50
EUBCX22M15	—	2000 mg/15 mL	20
EUBCX25M25	—	5000 mg/25 mL	20
EUBCX210M75	—	10,000 mg/75 mL	10

% Organic Loading: 12.30

Application:

Dual functionality for weak bases and hydrophobic compounds.

Hydrophobic Plus Quaternary Amine

PART NUMBER UNENDCAPPED	PART NUMBER ENDCAPPED	AMT. SORBENT/ TUBE VOL.	UNITS
EUQAX2L1	—	50 mg/1 mL	100
EUQAX211	—	100 mg/1 mL	100
EUQAX223	—	200 mg/3 mL	50
EUQAX253	—	500 mg/3 mL	50
EUQAX256	—	500 mg/6 mL	50
EUQAX2M6	—	1000 mg/6 mL	30
EUQAX21Z	—	100 mg/10 mL	50
EUQAX22Z	—	200 mg/10 mL	50
EUQAX25Z	—	500 mg/10 mL	50
EUQAX22M15	—	2000 mg/15 mL	20
EUQAX25M25	—	5000 mg/25 mL	20
EUQAX210M75	—	10,000 mg/75 mL	10

% Organic Loading: 13.60

Application:

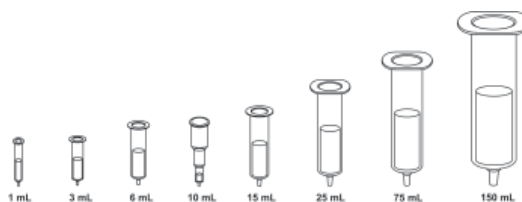
Dual functionality for weak acids and hydrophobic compounds.

ENVIRO-CLEAN® SOLID PHASE EXTRACTION CARTRIDGES

COPOLYMERIC PRODUCT GUIDE

Sorbents are offered in the following particle sizes:

Small Particle (5-20 µm)
 Intermediate Particle (20-40 µm)
 Standard Particle (40-60 µm)
 Large Particle (125-210 µm)



Hydrophobic Plus Aminopropyl			
PART NUMBER UNENDCAPPED	PART NUMBER ENDCAPPED	AMT. SORBENT/ TUBE VOL.	UNITS
EUNAX2L1	—	50 mg/1 mL	100
EUNAX211	—	100 mg/1 mL	100
EUNAX223	—	200 mg/3 mL	50
EUNAX253	—	500 mg/3 mL	50
EUNAX256	—	500 mg/6 mL	50
EUNAX2M6	—	1000 mg/6 mL	30
EUNAX21Z	—	100 mg/10 mL	50
EUNAX22Z	—	200 mg/10 mL	50
EUNAX25Z	—	500 mg/10 mL	50
EUNAX22M15	—	2000 mg/15 mL	20
EUNAX25M25	—	5000 mg/25 mL	20
EUNAX210M75	—	10,000 mg/75 mL	10

% Organic Loading: 12.30

Application:

Dual functionality for strong acids and hydrophobic compounds.

EXTRACTION AND TROUBLESHOOTING TIPS

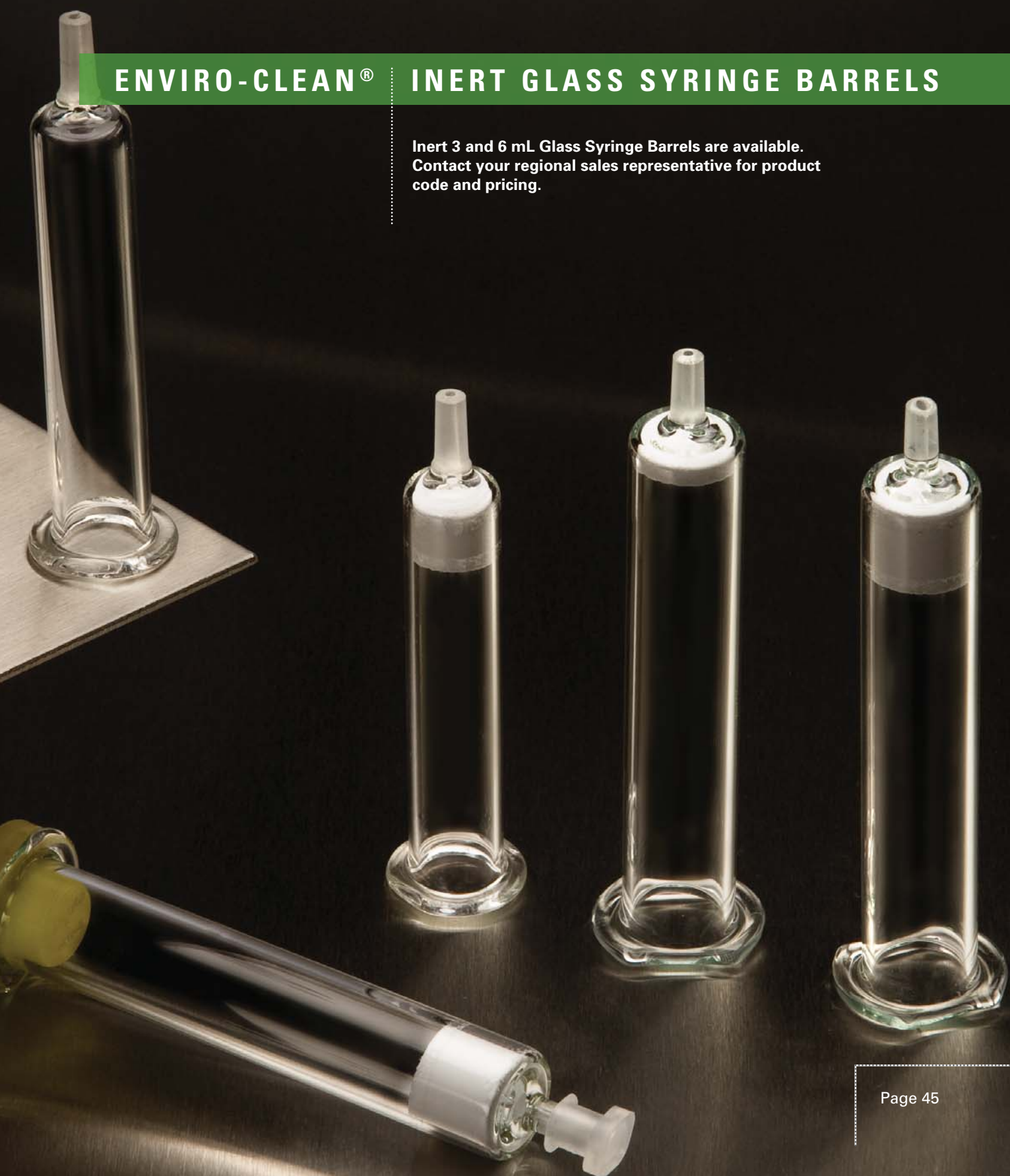
Low Recovery:

- Column may not be conditioned properly. Recondition with activation solvent and do not let the column dry out
- After conditioning, pass 1 to 2 bed volumes of solvent similar in composition to the actual sample—generally water or buffer—through the cartridge
- Switch to a sorbent that has a greater affinity for the analyte
- Reduce strength of wash solvent after sample extraction
- Analyte may be bound to the sorbent and require a stronger elution solvent



ENVIRO-CLEAN® INERT GLASS SYRINGE BARRELS

Inert 3 and 6 mL Glass Syringe Barrels are available.
Contact your regional sales representative for product
code and pricing.

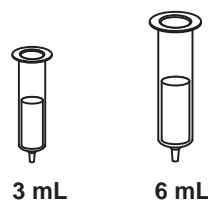


INERT GLASS SYRINGE BARRELS - SPE CARTRIDGES

HYDROPHOBIC PRODUCT GUIDE

Sorbents are offered in the following particle sizes:

Small Particle (5-20 μm)
 Intermediate Particle (20-40 μm)
 Standard Particle (40-60 μm)
 Large Particle (125-210 μm)



C6, Hexyl			
PART NUMBER UNENDCAPPED	PART NUMBER ENDCAPPED	AMT. SORBENT/TUBE VOL.	UNITS
EUC06113G	EEC06113G	100 mg/3 mL	30
EUC06153G	EEC06153G	500 mg/3 mL	30
EUC06156G	EEC06156G	500 mg/6 mL	30
EUC061M6G	EEC061M6G	1000 mg/6 mL	30

% Organic Loading: 11.00

Application:

Removes large or more hydrophobic compounds.

C7, Heptyl			
PART NUMBER UNENDCAPPED	PART NUMBER ENDCAPPED	AMT. SORBENT/TUBE VOL.	UNITS
EUC07123G	EEC07123G	200 mg/3 mL	30
EUC07153G	EEC07153G	500 mg/3 mL	30
EUC07156G	EEC07156G	500 mg/6 mL	30
EUC071M6G	EEC071M6G	1000 mg/6 mL	30

% Organic Loading:

NOT TESTED

Application:

Removes large or more hydrophobic compounds.

C8, Octyl			
PART NUMBER UNENDCAPPED	PART NUMBER ENDCAPPED	AMT. SORBENT/TUBE VOL.	UNITS
EUC08113G	EEC08113G	100 mg/3 mL	30
EUC08123G	EEC08123G	200 mg/3 mL	30
EUC08153G	EEC08153G	500 mg/3 mL	30
EUC08156G	EEC08156G	500 mg/6 mL	30
EUC081M6G	EEC081M6G	1000 mg/6 mL	30

% Organic Loading: 11.10

Application:

Removes large or more hydrophobic compounds.

INERT GLASS SYRINGE BARRELS - SPE CARTRIDGES

HYDROPHOBIC PRODUCT GUIDE



3 mL



6 mL

Sorbents are offered in the following particle sizes:

Small Particle (5-20 μm)

Intermediate Particle (20-40 μm)

Standard Particle (40-60 μm)

Large Particle (125-210 μm)

C10, n-Decyl

PART NUMBER UNENDCAPPED	PART NUMBER ENDCAPPED	AMT. SORBENT/ TUBE VOL.	UNITS
EUC10113G	EEC10113G	100 mg/3 mL	30
EUC10153G	EEC10153G	500 mg/3 mL	30
EUC10156G	EEC10156G	500 mg/6 mL	30
EUC101M6G	EEC101M6G	1000 mg/6 mL	30

% Organic Loading: 15.70

Application:

Removes large or more hydrophobic compounds.

C18, Octadecyl

PART NUMBER UNENDCAPPED	PART NUMBER ENDCAPPED	AMT. SORBENT/ TUBE VOL.	UNITS
EUC18113G	EEC18113G	100 mg/3 mL	30
EUC18123G	EEC18123G	200 mg/3 mL	30
EUC18153G	EEC18153G	500 mg/3 mL	30
EUC18156G	EEC18156G	500 mg/6 mL	30
EUC181M6G	EEC181M6G	1000 mg/6 mL	30

% Organic Loading: 15.50

Application:

Removes large or more hydrophobic compounds.

C20, Eicosyl

PART NUMBER UNENDCAPPED	PART NUMBER ENDCAPPED	AMT. SORBENT/ TUBE VOL.	UNITS
EUC20113G	EEC20113G	100 mg/3 mL	30
EUC20123G	EEC20123G	200 mg/3 mL	30
EUC20153G	EEC20153G	500 mg/3 mL	30
EUC201M6G	EEC201M6G	1000 mg/6 mL	30

% Organic Loading: 21.70

Application:

Removes hydrophobic impurities, de-salting and purification of hydrophobic compounds.

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INERT GLASS SYRINGE BARRELS - SPE CARTRIDGES

HYDROPHOBIC PRODUCT GUIDE

Sorbents are offered in the following particle sizes:

Small Particle (5-20 μm)
 Intermediate Particle (20-40 μm)
 Standard Particle (40-60 μm)
 Large Particle (125-210 μm)



3 mL



6 mL

C30, Tricontyl			
PART NUMBER UNENDCAPPED	PART NUMBER ENDCAPPED	AMT. SORBENT/TUBE VOL.	UNITS
EUC20113G	EEC20113G	100 mg/3 mL	30
EUC20123G	EEC20123G	200 mg/3 mL	30
EUC20153G	EEC20153G	500 mg/3 mL	30
EUC20156G	EEC20156G	500 mg/6 mL	30
EUC201M6G	EEC201M6G	1000 mg/6 mL	30

% Organic Loading: 24.30

Application:

Removes large or more hydrophobic compounds.

Cyclohexyl			
PART NUMBER UNENDCAPPED	PART NUMBER ENDCAPPED	AMT. SORBENT/TUBE VOL.	UNITS
EUCYH123G	EECYH123G	200 mg/3 mL	30
EUCYH153G	EECYH153G	500 mg/3 mL	30
EUCYH1M6G	EECYH1M6G	1000 mg/6 mL	30

% Organic Loading: 26.00

Application:

Removes large or more hydrophobic compounds.

Phenyl			
PART NUMBER UNENDCAPPED	PART NUMBER ENDCAPPED	AMT. SORBENT/TUBE VOL.	UNITS
EUPHY123G	EEPHY123G	200 mg/3 mL	30
EUPHY153G	EEPHY153G	500 mg/3 mL	30
EUPHY1M6G	EEPHY1M6G	1000 mg/6 mL	30

% Organic Loading: 11.60

Application:

Scavenger for phenolic compounds.

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ENVIRO

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INERT GLASS SYRINGE BARRELS - SPE CARTRIDGES

HYDROPHILIC PRODUCT GUIDE



3 mL



6 mL

Sorbents are offered in the following particle sizes:

Small Particle (5-20 μm)

Intermediate Particle (20-40 μm)

Standard Particle (40-60 μm)

Large Particle (125-210 μm)

Unbonded Silica (Acid Washed)

PART NUMBER UNENCAPPED	PART NUMBER ENDCAPPED	AMT. SORBENT/TUBE VOL.	UNITS
EUSIL123G	-	100 mg/3 mL	30
EUSIL153G	-	200 mg/3 mL	30
EUSIL156G	-	500 mg/3 mL	30
EUSIL1M6G	-	500 mg/6 mL	30
EUC101M6G	-	1000 mg/6 mL	30

% Organic Loading: N/A

Application:

Removes hydrophilic (polar) impurities, purification of hydrophilic (polar) compounds.

High-Surface Area Activity Silica

PART NUMBER UNENCAPPED	PART NUMBER ENDCAPPED	AMT. SORBENT/TUBE VOL.	UNITS
EHSIL123G	-	200 mg/3 mL	30
EHSIL153G	-	500 mg/3 mL	30
EHSIL156G	-	500 mg/6 mL	30
EHSIL1M6G	-	1000 mg/6 mL	30

% Organic Loading: N/A

Application:

Removes hydrophilic (polar) impurities, purification of hydrophilic (polar) compounds.

CN, Cyanopropyl

PART NUMBER UNENCAPPED	PART NUMBER ENDCAPPED	AMT. SORBENT/TUBE VOL.	UNITS
EUCNP123G	EECNP123G	200 mg/3 mL	30
EUCNP153G	EECNP153G	500 mg/3 mL	30
EUCNP156G	EECNP156G	500 mg/6 mL	30
EUCNP1M6G	EECNP1M6G	1000 mg/6 mL	30

% Organic Loading: 6.90

Application:

Removes steroid type compounds.

INERT GLASS SYRINGE BARRELS - SPE CARTRIDGES

HYDROPHILIC PRODUCT GUIDE

Sorbents are offered in the following particle sizes:

Small Particle (5-20 μm)
 Intermediate Particle (20-40 μm)
 Standard Particle (40-60 μm)
 Large Particle (125-210 μm)



3 mL



6 mL

Unbonded Silica (Acid Washed)			
PART NUMBER UNENDCAPPED	PART NUMBER ENDCAPPED	AMT. SORBENT/TUBE VOL.	UNITS
EUDOL123G	-	200 mg/3 mL	30
EUDOL153G	-	500 mg/3 mL	30
EUDOL1M6G	-	1000 mg/6 mL	30

% Organic Loading: N/A

Application:

Removes hydrophilic (polar) impurities, purification of hydrophilic (polar) compounds.

Florisil®			
PART NUMBER UNENDCAPPED	PART NUMBER ENDCAPPED	AMT. SORBENT/TUBE VOL.	UNITS
CUFLS123G	-	200 mg/3 mL	30
CUFLS153G	-	500 mg/3 mL	30
CUFLS156G	-	500 mg/6 mL	30
EUDOL1M6G	-	1000 mg/6 mL	30

% Organic Loading: N/A

Application:

Removes hydrophilic (polar) impurities, purification of hydrophilic (polar) compounds.

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EXTRACTION AND TROUBLESHOOTING TIPS

Slow Flow or Plugging:

- Sample may be high in suspended solids--Dilute sample by a known amount and re-extract sample
- Load less sample
- Check vacuum setting and increase vacuum
- Add glass wool to the top of the cartridge for high suspended solid samples

Oil and Grease Cartridge:

- Use glass wool with sodium sulfate when drying the hexane extract---filter paper may absorb oil and grease reducing recovery
- Always use gloves when handling vials as skin oils will affect recovery

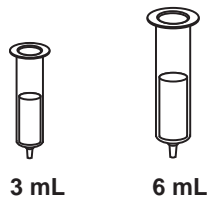


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GLASS TUBES AND TEFLON FRITS



GLASS TUBES				
PART NUMBER	TUBE DESCRIPTION	TUBE VOLUME	FRIT DESCRIPTION	QUANTITY
GLS008P	Empty glass tubes	6 mL	None	30
RFV01F8G	Glass tube	6 mL	1 Teflon frit inserted	30
GLS004P	Empty glass tubes	3 mL	None	30
RFV01F4G	Glass tube	3 mL	1 Teflon frit inserted	30

GLASS TUBES				
PART NUMBER	TUBE DESCRIPTION	TUBE VOLUME	FRIT DESCRIPTION	QUANTITY
FR10081T	None	6 mL	Teflon frit 10 porosity	30
FR10041T	None	3 mL	Teflon frit 10 porosity	30

RESERVOIRS

FRITTED RESERVOIRS; 1 FRIT, 10 MICRON POROSITY; STANDARD CONFIGURATION

PART NUMBER	DESCRIPTION	UNITS	PRICE
RFV01F1P	1 mL capacity	50	\$35.00
RFV01F4P	4 mL capacity	50	\$37.00
RFV01F8P	8 mL capacity	50	\$39.00
RFV1F10P	10 mL capacity	50	\$50.00
RFV1F15P	15 mL capacity	50	\$48.00
RFV1F25P	25 mL capacity	50	\$50.00
RFV1F75P	75 mL capacity	20	\$27.00

FRITTED RESERVOIRS; 2 FRIT, 10 MICRON POROSITY; STANDARD CONFIGURATION

PART NUMBER	DESCRIPTION	UNITS	PRICE
RFV02F1P	1 mL capacity	50	\$37.00
RFV02F4P	4 mL capacity	50	\$40.00
RFV02F8P	8 mL capacity	50	\$42.00
RFV2F10P	10 mL capacity	50	\$55.00
RFV2F15P	15 mL capacity	50	\$51.00
RFV2F25P	25 mL capacity	50	\$53.00
RFV2F75P	75 mL capacity	20	\$30.00

FRITTED RESERVOIRS; 1 FRIT, 20 MICRON POROSITY; STANDARD CONFIGURATION

PART NUMBER	DESCRIPTION	UNITS	PRICE
RFT01F1P	1 mL capacity	50	\$35.00
RFT01F4P	4 mL capacity	50	\$37.00
RFT01F8P	8 mL capacity	50	\$39.00
RFT1F10P	10 mL capacity	50	\$50.00
RFT1F15P	15 mL capacity	50	\$48.00
RFT1F25P	25 mL capacity	20	\$50.00
RFT1F75P	75 mL capacity	20	\$27.00

FRITTED RESERVOIRS; 2 FRIT, 20 MICRON POROSITY; STANDARD CONFIGURATION

PART NUMBER	DESCRIPTION	UNITS	PRICE
RFT02F1P	1 mL capacity	50	\$37.00
RFT02F4P	4 mL capacity	50	\$40.00
RFT02F8P	8 mL capacity	50	\$42.00
RFT2F10P	10 mL capacity	50	\$55.00
RFT2F15P	15 mL capacity	50	\$51.00
RFT2F25P	25 mL capacity	20	\$53.00
RFT2F75P	75 mL capacity	20	\$30.00

FRITTED FLANGELESS RESERVOIRS; 1 FRIT, 20 MICRON POROSITY; STANDARD CONFIGURATION

PART NUMBER	DESCRIPTION	UNITS	PRICE
RFT01FR3P	4 mL capacity	50	\$37.00

EMPTY RESERVOIRS; STANDARD CONFIGURATION

PART NUMBER	DESCRIPTION	UNITS	PRICE
RFV0001P	1 mL capacity	50	\$17.00
RFV0004P	4 mL capacity	50	\$18.00
RFV0008P	8 mL capacity	50	\$20.00
RFV0010P	10 mL capacity	50	\$34.00
RFV0015P	15 mL capacity	50	\$25.00
RFV0025P	25 mL capacity	50	\$26.00
RFV0075P	75 mL capacity	20	\$28.00
RFV00150P	150 mL capacity	10	\$53.00

EMPTY FLANGELESS TUBE; STANDARD CONFIGURATION

PART NUMBER	DESCRIPTION	UNITS	PRICE
RFT00R3P	4 mL capacity	50	\$27.00

FRITS

POROUS POLYETHYLENE 10 MICRON POROSITY (1/16" THICKNESS); STANDARD CONFIGURATION

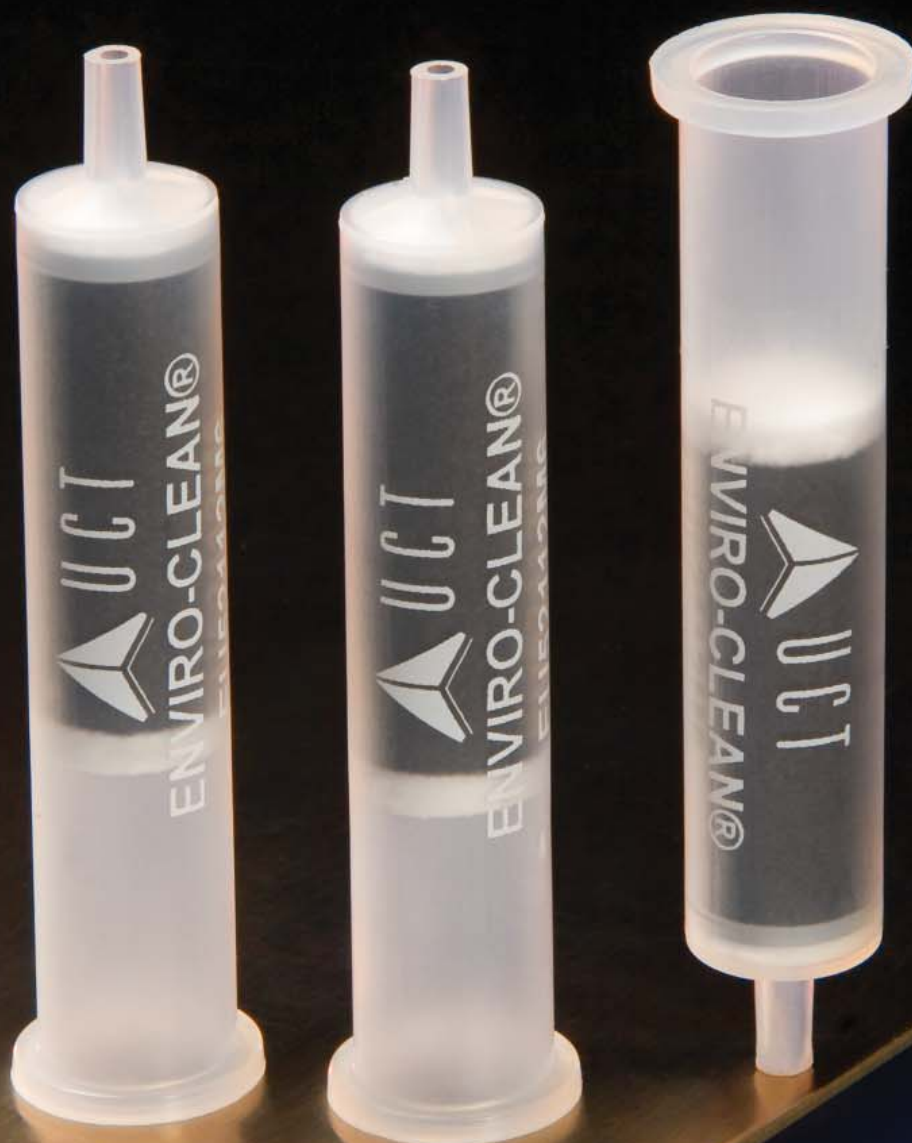
PART NUMBER	DESCRIPTION	UNITS	PRICE
FR10011P	1 mL capacity	100	\$26.00
FR10041P	4 mL capacity	100	\$29.00
FR10081P	8 mL capacity	100	\$31.00
FR10101P	10 mL capacity	100	\$32.00
FR10151P	15 mL capacity	100	\$33.00
FR10251P	25 mL capacity	100	\$36.00
FR10751P	75 mL capacity	100	\$38.00

POROUS POLYETHYLENE 20 MICRON POROSITY (1/16" THICKNESS); STANDARD CONFIGURATION

PART NUMBER	DESCRIPTION	UNITS	PRICE
FR20011P	1 mL capacity	100	\$26.00
FR20041P	4 mL capacity	100	\$29.00
FR20081P	8 mL capacity	100	\$31.00
FR20101P	10 mL capacity	100	\$32.00
FR20151P	15 mL capacity	100	\$33.00
FR20251P	25 mL capacity	100	\$36.00
FR20751P	75 mL capacity	100	\$38.00

POROUS POLYETHYLENE 20 MICRON POROSITY (1/8" THICKNESS); STANDARD CONFIGURATION

PART NUMBER	DESCRIPTION	UNITS	PRICE
FT20011P	1 mL capacity	100	\$26.00
FT20041P	4 mL capacity	100	\$29.00
FT20081P	8 mL capacity	100	\$31.00
FT20101P	10 mL capacity	100	\$32.00
FT20151P	15 mL capacity	100	\$33.00
FT20251P	25 mL capacity	100	\$36.00
FT20751P	75 mL capacity	100	\$38.00



521 COLUMN
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