



**RESTEK**

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**ECH**nology Pty Ltd

Australian Distributors  
Importers & Manufacturers  
[www.chromtech.net.au](http://www.chromtech.net.au)

**11/12**

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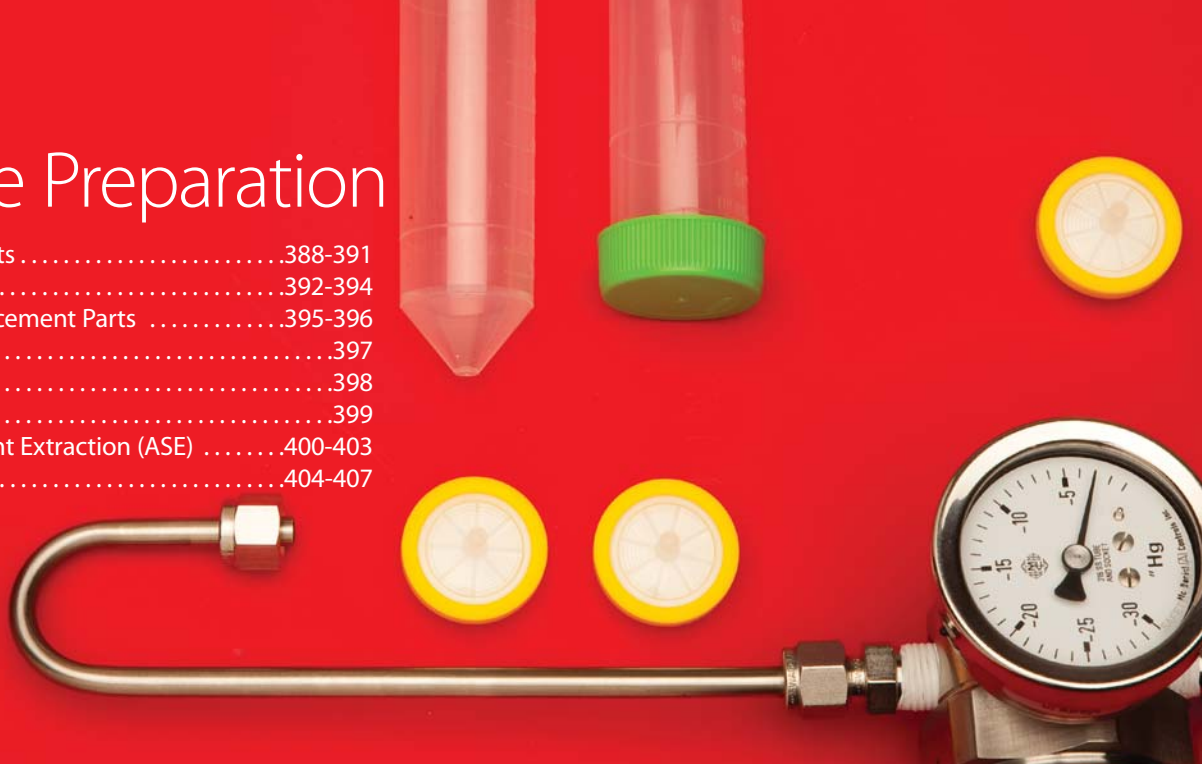
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## QuEChERS Products

**Multi-residue pesticide analysis from food and other matrices.**

### Restek Q-sep™ QuEChERS Products

Fast, Simple Sample Prep for Multi-Residue Pesticide Analysis

- Ready-to-use tubes, no glassware required.
- Prew weighed, ultra-pure sorbents.
- Support AOAC (2007.01) and European (EN 15662) QuEChERS methods.



QuEChERS methods are fast, easy, and cost-effective, and Restek Q-sep™ products make QuEChERS procedures even simpler. All extraction salts, sorbents and sample tubes are included—no specialized equipment or glassware is required. Prepare samples more efficiently with a complete line of QuEChERS supplies from Restek.

**Prepare samples more quickly, easily, and cost-effectively with QuEChERS.**

	Mini-Luke or Modified Luke Method	QuEChERS	Savings with QuEChERS
Estimated time to process 6 samples (min.)	120	30	4x faster
Solvent used (mL)	60-90	10	6-9x less solvent
Chlorinated waste (mL)	20-30	0	Safer, cheaper, greener
Glassware/specialized equipment	capacity for 200mL, quartz wool, funnel, water bath or evaporator	none	Ready-to-use

## free literature

Visit [www.restek.com/quenchers](http://www.restek.com/quenchers) for new products & detailed technical information, including the literature listed here.



### Developing New Methods for Pesticides in Dietary Supplements: Advantages of the QuEChERS Approach

lit. cat.# PHAN1242

### QuEChERS Products: Fast, Simple Sample Prep for Multi-Residue Pesticide Analysis

lit. cat.# FFFL1183A



### Fast Screening of Recalled Tylenol® for Tribromoanisole and Related Adulterants Using QuEChERS and GC-TOFMS

lit. cat.# GNAN1263

### Fast, Simple QuEChERS Extraction and Cleanup of Pesticide Residue Samples

lit. cat.# GNAN1097A

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### Q-sep™ QuEChERS Extraction Salts

- Salt packets eliminate the need for a second empty tube to transfer salts.
- Go green by using packets with reusable tubes.
- Convenient and easy to use.



Description	Material	Methods	qty.	cat#	price
Q110 Kit	4g MgSO <sub>4</sub> , 1g NaCl, 1g TSCD, 0.5g DHS with 50mL Centrifuge Tube	European EN 15662	50 packets & 50 tubes	26235	
Q110 Packets	4g MgSO <sub>4</sub> , 1g NaCl, 1g TSCD, 0.5g DHS	European EN 15662	50 packets	26236	
Q150 Kit	6g MgSO <sub>4</sub> , 1.5g NaOAc with 50mL Centrifuge Tube	AOAC 2007.01	8 & 50 tubes	26237	
Q150 Packets	6g MgSO <sub>4</sub> , 1.5g NaOAc	AOAC 2007.01	50 packets	26238	
Empty 50mL Centrifuge Tube, Polypropylene			50-pk.	26239	
Empty 50mL Centrifuge Tube, Teflon FEP			2-pk.	23997	

TSCD—trisodium citrate dihydrate

DHS—disodium hydrogen citrate sesquihydrate

NaOAc—sodium acetate



### Q-sep™ QuEChERS dSPE Tubes for Extract Clean-Up

Fast, Simple Sample Prep for Multi-Residue Pesticide Analysis

- Packaged in mylar subpacks for enhanced protection and storage stability.
- Individually labeled tubes for easy sorbent identification.

Description	Material	Methods	qty.	cat#	price
<b>2mL Micro-Centrifuge Tubes for dSPE (clean-up of 1mL extract)</b>					
Q210	150mg MgSO <sub>4</sub> , 25mg PSA	European EN 15662	100-pk.	26215	
Q211	150mg MgSO <sub>4</sub> , 25mg PSA, 25mg C18		100-pk.	26216	
Q212	150mg MgSO <sub>4</sub> , 25mg PSA, 2.5mg GCB	European EN 15662	100-pk.	26217	
Q213	150mg MgSO <sub>4</sub> , 25mg PSA, 7.5mg GCB	European EN 15662	100-pk.	26218	
Q250	150mg MgSO <sub>4</sub> , 50mg PSA	AOAC 2007.01	100-pk.	26124	
Q251	150mg MgSO <sub>4</sub> , 50mg PSA, 50mg C18	AOAC 2007.01	100-pk.	26125	
Q253	150mg MgSO <sub>4</sub> , 50mg PSA, 50mg GCB		100-pk.	26123	
Q252	150mg MgSO <sub>4</sub> , 50mg PSA, 50mg C18, 50mg GCB	AOAC 2007.01	100-pk.	26219	
<b>15mL Centrifuge Tubes for dSPE (clean-up of 6mL extract)</b>					
Q350	1200mg MgSO <sub>4</sub> , 400mg PSA	AOAC 2007.01	50-pk.	26220	
Q351	1200mg MgSO <sub>4</sub> , 400mg PSA, 400mg C18	AOAC 2007.01	50-pk.	26221	
Q352	1200mg MgSO <sub>4</sub> , 400mg PSA, 400mg C18, 400mg GCB	AOAC 2007.01	50-pk.	26222	
Q370	900mg MgSO <sub>4</sub> , 150mg PSA	European EN 15662	50-pk.	26223	
Q371	900mg MgSO <sub>4</sub> , 150mg PSA, 15mg GCB	European EN 15662	50-pk.	26224	
Q372	900mg MgSO <sub>4</sub> , 150mg PSA, 45mg GCB	European EN 15662	50-pk.	26225	
Q373	900mg MgSO <sub>4</sub> , 150mg PSA, 150mg C18		50-pk.	26226	
Q374	900mg MgSO <sub>4</sub> , 300mg PSA, 150mg GCB		50-pk.	26126	

PSA—primary and secondary amine exchange material

GCB—graphitized carbon black



### Sorbent Guide

#### Sorbent Removes

PSA	sugars, fatty acids, organic acids, anthocyanine pigments
C18	lipids, nonpolar interferences
GCB	pigments, sterols, nonpolar interferences
PSA	—primary and secondary amine exchange material
GCB	—graphitized carbon black

**Try QuEChERS risk-free today!**

Call 800-356-1688 or your Restek representative to request a free sample pack of Q-sep™ QuEChERS tubes. (Sample pack orders cannot be placed on line. I limit one pack per customer.)



www.restek.com **389**



Dimensions: 9"h x 14.5"w x 17"d  
 (22.9 cm x 36.8 cm x 43.2 cm)



26249

### Q-sep™ 3000 Centrifuge

for QuEChERS

- Meets requirements of AOAC and European QuEChERS methodology.
- Supports 50 mL, 15 mL, and 2 mL centrifuge tubes.
- Small footprint requires less bench space.
- Safe and reliable—UL, CSA, and CE approved, 1-year warranty.

Priced to fit your laboratory's budget, the Q-sep™ 3000 Centrifuge is the first centrifuge specifically designed for QuEChERS methodology. This compact, quiet, yet powerful, unit spins at the 3,000 g force required by the European method.

Centrifuge includes 50 mL tube carriers (6), 50 mL conical tube inserts (6), 4-place 15 mL tube carriers (6), and 2 mL tube adaptors (24).



26232

26233

26234

Description	qty.	cat.#	price
Q-sep 3000 Centrifuge, 110V	ea.	26230	
Q-sep 3000 Centrifuge, 220V	ea.	26231	
<b>Replacement Accessories</b>			
50mL Tube Carrier for Q-sep 3000 Centrifuge	2-pk.	26232	
50mL Conical Tube Insert for Q-sep 3000 Centrifuge	6-pk.	26249	
4-Place Tube Carrier for Q-sep 3000 Centrifuge	2-pk.	26233	
2mL Tube Adaptors for Q-sep 3000 Centrifuge	4-pk.	26234	











## Complete Product Offering

to support AOAC (2007.01)  
 & European (EN 15662)  
 QuEChERS Methods

- Comprehensive portfolio of QuEChERS tubes.
- Method-specific internal and QC standards.
- Rxi®-5Sil MS Capillary column
- Ultra Aqueous C18 LC Column.
- Q-sep™ 3000 Centrifuge

[www.restek.com/quechers](http://www.restek.com/quechers)

## Selection Guide for Q-sep™ dSPE Tubes

Commodity types and examples	AOAC 2007.01	EN 15662	Mini-multiresidue	Additional products
 <b>General purpose</b> <ul style="list-style-type: none"> <li>• Celery</li> <li>• Head lettuce</li> <li>• Cucumber</li> <li>• Melon</li> </ul>	<b>Q-sep Q250</b> 2mL, 100-pk. (cat.# 26124)  <b>Q-sep Q350</b> 15mL, 50-pk. (cat.# 26220)	<b>Q-sep Q210</b> 2mL, 100-pk. (cat.# 26215)  <b>Q-sep Q370</b> 15mL, 50-pk. (cat.# 26223)	<b>Q-sep Q210</b> 2mL, 100-pk. (cat.# 26215)	
 <b>Fatty or waxy fruits &amp; vegetables</b> <ul style="list-style-type: none"> <li>• Cereals</li> <li>• Avocado</li> <li>• Nuts &amp; seeds</li> <li>• Dairy</li> </ul>	<b>Q-sep Q251</b> 2mL, 100-pk. (cat.# 26125)  <b>Q-sep Q351</b> 15mL, 50-pk. (cat.# 26221)		<b>Q-sep Q211</b> 2mL, 100-pk. (cat.# 26216)	<b>Q-sep Q373</b> 15mL, 50-pk. (cat.# 26226)
 <b>Pigmented fruits &amp; vegetables</b> <ul style="list-style-type: none"> <li>• Strawberries</li> <li>• Sweet potatoes</li> <li>• Tomatoes</li> </ul>	<b>Q-sep Q352</b> 15mL, 50-pk. (cat.# 26222)	<b>Q-sep Q212</b> 2mL, 100-pk. (cat.# 26217)  <b>Q-sep Q371</b> 15mL, 50-pk. (cat.# 26224)	<b>Q-sep Q212</b> 2mL, 100-pk. (cat.# 26217)	<b>Q-sep Q253</b> 2mL, 100-pk. (cat.# 26123)
 <b>Highly pigmented fruits &amp; vegetables</b> <ul style="list-style-type: none"> <li>• Red peppers</li> <li>• Spinach</li> <li>• Blueberries</li> </ul>	<b>Q-sep Q252</b> 2mL, 100-pk. (cat.# 26219)	<b>Q-sep Q213</b> 2mL, 100-pk. (cat.# 26218)  <b>Q-sep Q372</b> 15mL, 50-pk. (cat.# 26225)	<b>Q-sep Q213</b> 2mL, 100-pk. (cat.# 26218)	<b>Q-sep Q374</b> 15mL, 50-pk. (cat.# 26126)
Download free instructions at <b><a href="http://www.restek.com/quechers">www.restek.com/quechers</a></b>	Instruction sheet# 805-01 002	Instruction sheet# 805-01 001	Instruction sheet# 805-01 001	Generic dSPE 805-01 003



### Restek Customer Service

#### In the U.S.

Call: 800-356-1688 (ext. 3) or 814-353-1300 (ext. 3)

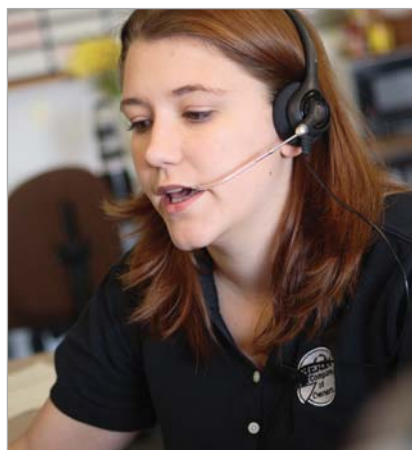
Monday–Friday 8:00 a.m.–6:00 p.m. ET

Fax: 814-353-1309—24-hours a day

Online: [www.restek.com](http://www.restek.com)—24-hours a day

#### Outside the U.S.

Contact your Restek representative:  
Refer to our list on pages 4-5 or visit our website at [www.restek.com](http://www.restek.com)



Melissa Decker, Customer Service





26228



24035

All cartridges are manufactured using high density polypropylene and have polyethylene frits unless otherwise noted.



Free sample packs of SPE cartridges are available by adding -248 to the catalog number when you call to place your order.



## please note

If you need a custom SPE cartridge, contact our Technical Service chemists or your Restek representative.



25989



26207

## Resprep® SPE Cartridges (Normal Phase)

Hydrophilic (polar) adsorbents used to extract hydrophilic analytes from nonpolar matrices, such as organic solvents (e.g., polar contaminants from sample extracts).

	3mL/500mg (50-pk.)	6mL/500mg (30-pk.)	6mL/1000mg (30-pk.)	6mL/1000mg (100-pk.)	15mL/2g (100-pk.)
Florisil (EPA SW 846 methods and CLP protocols)	24031 24032*	26086**	24034 26085**	26205	26228
Silica (EPA SW 846 methods)	24035 24036*		24038		

\*Teflon frits

\*\*Glass tubes with Teflon frits

## Resprep® SPE Cartridges (Ion Exchange Phases)

Ionized phases bonded to silica-based adsorbents used to extract positively- or negatively-charged analytes from aqueous matrices (e.g., tricyclic antidepressants from plasma).

	1mL/100mg (100-pk.)	3mL/200mg (50-pk.)	3mL/500mg (50-pk.)	6mL/500mg (30-pk.)	6mL/1000mg (30-pk.)
SAX, quaternary amine	26054		26055		
SCX, benzyl	26056	26058	26057	26059	26060
WAX, NH <sub>2</sub> , primary amine	26050	26051	26052	26053	
WCX, COOH, carboxylic acid	26061		26062 \$170		

Strong Anion Exchange (SAX); Strong Cation Exchange (SCX); Weak Anion Exchange (WAX); Weak Cation Exchange (WCX)

## Resprep® SPE Cartridges (Bonded Reversed Phases)

Hydrophobic (nonpolar) silica-based adsorbents, used to extract hydrophobic analytes from polar matrices, such as water (e.g., pesticides from water).

	1mL/100mg (100-pk.)	3mL/200mg (50-pk.)	3mL/500mg (50-pk.)	6mL/500mg (30-pk.)	6mL/1000mg (30-pk.)	20mL/5g (20-pk.)	60mL/10g (16-pk.)
C18 (high load, endcapped)	26030 \$139	26031	24050	24052	24051	26034 \$185	26035
C8 (high load, endcapped)	26036 \$139	26037	26038	26039	26040		
Cyclohexyl (endcapped)					26043		

## Resprep® SPE Cartridges (Polymeric DVB Adsorbents)

Polymeric adsorbents are used to extract a wide range of polar aromatic and unsaturated analytes from aqueous matrices and can tolerate a wider pH range than silica-based adsorbents.

	6mL/500mg (50-pk.)
DVB (Teflon frits)	25989

## Closed End SPE Cartridge: Activated Sodium Sulfate

- High quality anhydrous sodium sulfate.
- Approximately 2 grams prepackaged in a convenient capped cartridge with both male and female luer ends for easy connection to a variety of devices or equipment.
- The adsorbent is fully activated and ready to use for removal of excess water from organic solvent solutions, prior to many types of analysis.
- Capped cartridges will remain active for long periods of storage in the lab.

SPE Cartridge	Bed Weight	qty.	cat#	price
Activated Sodium Sulfate	2g	50-pk.	26207	

### CarboPrep® SPE Cartridges

- Improved recovery of sulfonylurea herbicides, phenols, carbamates, and triazine herbicides, compared to C18 and C8 cartridges.
- Wide range of selectivity for both analytes and their metabolites or degradation products.
- Rapid sampling flow rates; uncompromised recoveries.
- Maximum capacity for contaminant cleanup.
- Controlled manufacturing improves cleanliness, ensures reproducible performance.

CarboPrep® cartridges are manufactured from chromatographic-grade, nonporous, graphitized carbon. Our manufacturing process minimizes variability and improves recovery and cleanup procedures. We offer two types of carbons: CarboPrep® 90 has a surface area of approximately 90 m<sup>2</sup>/g, CarboPrep® 200 has a surface area of 200 m<sup>2</sup>/g. Both have higher capacity than silica-based packings for a variety of compounds.

CarboPrep® cartridges can be used for sample extraction of organic compounds and extract cleanup of matrix interferences.

SPE Cartridge	Tube Volume, Bed Weight	qty.	cat#	price
CarboPrep 90	3mL, 250mg	50-pk.	26091	
CarboPrep 90	6mL, 500mg	30-pk.	26092	
CarboPrep 200	3mL, 250mg	50-pk.	26088	
CarboPrep 200	6mL, 500mg	30-pk.	26087	



26091



### free literature

#### Improve Recoveries of Chlorinated Pesticides with CarboPrep® SPE Cleanup

Download your free copy from  
**www.restek.com**  
lit. cat.# EVAN1197



### also available

For Rtx®-CLPesticides columns, see **page 88**.

### CarboPrep® Reversing SPE Cartridges

- High adsorbent capacity (surface area ~200 m<sup>2</sup>/g) for large volume sampling.
- Chromatographic grade graphitized carbon provides consistent and quantitative recoveries of a wide variety of semivolatiles, pesticides, and herbicides.
- 500 mg bed weight (100 mg and 900 mg bed weights available on request).

Reversing cartridge design allows convenient inverted elution of strongly retained analytes using minimum solvent volumes. Ideal design for extraction of pesticides in water.<sup>1</sup>

SPE Cartridge	Bed Weight	qty.	cat#	price
CarboPrep 200 Reversing Cartridge	500mg	30-pk.	26206	

<sup>1</sup>Crescenzi, C.; DiCorcia, A.; Guerriero, E.; and Saperi, R. "Development of a Multiresidue Method for Analyzing Pesticide Traces in Water Based on Solid-Phase Extraction and Electrospray Liquid Chromatography Mass Spectrometry", Environmental Science & Technology vol.31, no. 2 (1997) 479-488.  
(Reference not available from Restek.)



26206

### Pesticide Residue Cleanup SPE Cartridges

- Convenient, multiple adsorbent beds in a single cartridge.
- For use in multi-residue pesticide analysis, to remove matrix interferences.
- Excellent for cleanup of dietary supplement extracts.

SPE Cartridge	qty.	cat#	price
6mL Combo SPE Cartridge Packed with 500mg CarboPrep 90/500mg Aminopropyl, Polyethylene Frits	30-pk.	26193	
6mL Combo SPE Cartridge Packed with 500mg CarboPrep 90/500mg PSA, Polyethylene Frits	30-pk.	26194	
6mL SPE Cartridge Packed with 500mg PSA, Polyethylene Frits	30-pk.	26195	
6mL Combo SPE Cartridge Packed with 200mg CarboPrep 200 and 400mg PSA, Teflon Frits	30-pk.	26127	
6mL Combo SPE Cartridge Packed with 250mg CarboPrep 200 and 500mg PSA, Teflon Frits	30-pk.	26128	
6mL Combo SPE Cartridge Packed with 500mg CarboPrep 200 and 500mg PSA, Teflon Frits	30-pk.	26129	



26194



26195



26128



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### Method Specific SPE Cartridges

These cartridges have been specifically designed to provide consistent and reproducible results for the method or application stated.

Description	Applications	Tube Volume, Bed Weight	qty.	cat.#	price
<b>EPH Fractionation</b>	Extraction of hexane-extractable petroleum hydrocarbons from soil and waste samples. Specially treated to reduce contaminants and increase capacity. Silica packing.	20mL, 5g	20-pk.	26065	
<b>EPA Methods 521 &amp; 522</b>	For use in EPA Method 521: Nitrosamines in Drinking Water and EPA Method 522 for 1,4-Dioxane in Drinking Water. Activated charcoal packing.	6mL, 2g	30-pk.	26032	
<b>EPA Method 548.1</b>	Extraction of endotoxin from aqueous samples. Weak anion exchange resin (BioRex 5) packing.	6mL	30-pk.	26063	
<b>Ultra Quat SPE</b>	For use in HPLC analysis of paraquat/diquat, as an alternative to EPA 549.2. For an HPLC column developed specifically for this application, see page 189.	6mL, 500mg	30-pk.	25499	
<b>EPA Method 8321 (AH SPE)</b>	For use in HPLC analysis of phenoxy acid herbicides.	6mL, 500mg	30-pk.	26029	
<b>Organo Tin</b>	High-capacity clean-up of butyl and phenyl tin compounds from soil, water, and biota. Mixed bed.	60mL	16-pk.	24049	
<b>Drug Prep I</b>	Suitable for acidic, basic, and neutral drugs. Mixed-mode hydrophobic and ion exchange sites provide selective, reproducible extraction of biological samples containing therapeutic or illegal drugs.	3mL, 200mg 10mL, 200mg	50-pk. 50-pk.	26044 26045	
<b>Drug Prep II</b>	Extraction of THCA from biological samples. Copolymeric anion exchange sites provide selective, reproducible extraction of THCA from urine.	3mL, 200mg 10mL, 200mg	50-pk. 50-pk.	26046 26047	
<b>GHB</b>	Extraction of $\gamma$ -hydroxybutyric acid from biological samples. Provides reproducible extraction of GHB from urine, blood, or tissue without conversion to GBL ( $\gamma$ -butyrolactone).	10mL, 200mg	50-pk.	26208	
<b>RDX</b>	Extraction of explosive compounds (similar to EPA Method 8095 and 8330 list) from water samples.	6mL, 500mg	30-pk.	26093	



26012



26018



26003



26000



26007

### Resprep® SPE Tube Parts & Accessories

Empty Tubes (polypropylene)	Volume	qty.	cat.#	price
	1mL	50-pk.	26010	
	3mL	50-pk.	26011	
	6mL	50-pk.	26012	
	15mL	50-pk.	26013	
	sample reservoir, 25mL	12-pk.	26014	
	sample reservoir, 70mL	12-pk.	26015	
Frits (polyethylene), 20 $\mu$ m	Fits Tube Volume, Diameter	qty.	cat.#	price
	1mL, 6mm	100-pk.	26016	
	3mL, 9mm	100-pk.	26017	
	6mL, 1.2cm	100-pk.	26018	
	15mL, 1.6cm	100-pk.	26019	
	25mL, 2.0cm*	100-pk.	26020	
	70mL, 2.6cm**	100-pk.	26021	
Tube Caps	Fits Tube Volume	qty.	cat.#	price
	1mL	12-pk.	26001	
	3mL	12-pk.	26002	
	6mL	12-pk.	26003	
	15mL	12-pk.	26004	
	25mL*	12-pk.	26005	
	70mL**	12-pk.	26006	
Female Luer End Caps	Fits Tube Volume	qty.	cat.#	price
	universal	12-pk.	26000	
Connectors	Fits Tube Volume	qty.	cat.#	price
	1, 3, 6mL	12-pk.	26007	
	15, 25mL*	12-pk.	26008	
	70mL**	12-pk.	26009	

\*For 20mL packed tubes.

\*\*For 60mL packed tubes.

### did you know?

You can elute an SPE tube manually with our connectors and NORM-JECT® syringes. See **page 369**.

## Resprep® 12- or 24-Port SPE Manifolds

- Use with any standard male luer-end SPE cartridges.
- Inert, Teflon® sample guides reduce cross-contamination and carryover.
- Flexible sample collection rack will accommodate a variety of receiving vessels.
- Quick vacuum-release valve for better system control.
- Individual vacuum control for each cartridge—improves reproducibility.



Description	qty.	cat.#	price
<b>Complete Resprep SPE Manifold, 12-Port</b> (Includes: glass basin with built-in vacuum regulator, polypropylene lid with 12 individual control valves, 12-position collection rack, 12 Teflon sample guides, and waste container)	kit	26077	
<b>Complete Resprep SPE Manifold, 24-Port</b> (Includes: glass basin with built-in vacuum regulator, polypropylene lid with 24 individual control valves, 24-position collection rack, and 24 Teflon sample guides)	kit	26080	

## Resprep® Manifold Replacement Parts

Description	qty.	cat.#	price
Replacement Waste Container, 12-Port	ea.	24014	
Replacement Vacuum Valve and Gauge Assembly	ea.	24008	
Glass Vacuum Chamber w/gauge & valve for Resprep manifolds, 6 or 12-Port	ea.	25991	
<b>Collection Rack</b>			
Collection Rack, 12-Port	ea.	26079	
Collection Rack, 24-Port	ea.	26082	
<b>Manifold Lid</b>			
Replacement Manifold Lid (sample guides not included), 12-Port	ea.	26078	
Replacement Manifold Lid (sample guides not included), 24-Port	ea.	26081	
<b>Manifold Lid Replacement Parts</b>			
Valves, 12 or 24-Port	2-pk.	26083	
Valve Attachment	48-pk.	26130	
Needle Attachment	48-pk.	26131	
Sample Guides, 12 or 24-Port	12-pk.	26084	

\*Not included in 24-port manifold (cat.# 26080 or 26082).

## Oil-Free Vacuum/Pressure Station

for 12-Port Resprep® SPE Systems

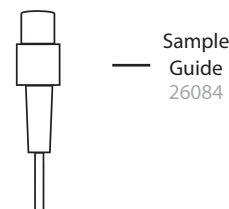
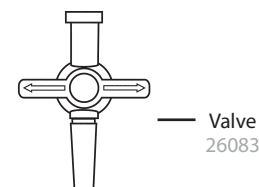
Allows switching from pressure to vacuum in a matter of seconds. Quiet, oil-free unit won't contaminate the extraction system or your samples. Provides 20" Hg (68k Pa) vacuum or 18 psi (124 kPa) pressure.

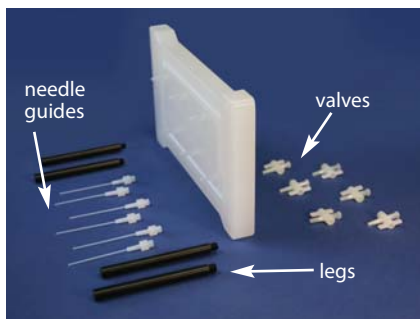
Description	qty.	cat.#	price
Oil-Free Vacuum/Pressure Station, 115VAC, 60Hz, US	ea.	24002	
Oil-Free Vacuum/Pressure Station, 230VAC, 50Hz, Europe (CE certified)	ea.	24003	
Vacuum Tubing (10ft./3m, 1/4" ID)	ea.	24016	

Not recommended for use with 24-port manifold.

Warranty period is one-year from date of purchase. Evaluation fee is charged for repairs out of warranty.

## Resprep® Manifold Replacement Parts





Lid components prior to assembly.



Fully assembled unit shown with Glass Vacuum Chamber (cat.# 25991) and Disk Holders (cat.# 24020)

### Resprep® 6-Port Disk Manifold Lid

- Low cost option for disk extraction; fits standard 3 3/4" x 7 1/2" glass vacuum chambers.
- Doubles sample capacity—holds 6 disks, compared to standard 12-port manifolds, which only hold 3.
- Individual vacuum control for each port improves reproducibility.
- Collection plate design secures variety of receiving vessels.
- Inert Teflon® sample guides reduce cross-contamination and carryover.
- Compatible with any standard male luer end disk holder.



Description	qty.	cat.#	price
<b>Resprep 6-Port Disk Manifold Lid*</b>			
Includes: polypropylene lid with 6 ports, 6 nylon valves, 6 Teflon needle guides, 4 black lid legs, collection baseplate, collection plate for volumetric flasks, collection plate for concentrator tubes, 3 white collection plate posts, 12 collection plate retaining clips			
	kit	25992	
<b>Accessories</b>			
Glass Vacuum Chamber w/gauge & valve for Resprep manifolds, 6 or 12-Port	ea.	25991	
<b>Manifold Lid Replacement Parts</b>			
Valves, 12 or 24-Port	2-pk.	26083	
Valve Attachment	48-pk.	26130	
Needle Attachment	48-pk.	26131	
Sample Guides, 12 or 24-Port	12-pk.	26084	
Gasket, 12-port	2-pk.	24011	

\*Vacuum chamber not included.



### Resprep® Sample Delivery System

- Compatible with Resprep® 1, 3, 6, and 15 mL SPE cartridges and Diskcover-47 Extraction Disk Holder (cat.# 24020).
- 6 Teflon® transfer lines (1/8" OD x 1/16" ID x 36" long); each contains a different embedded color stripe, for easy sample identification.
- Specified in EPA drinking water methods.
- Tested to pH of 1 to ensure no contaminants leach from system.

Use the Resprep® Sample Delivery System to transfer large volumes of low viscosity samples directly from a bottle to a solid phase extraction cartridge or to a disk on a vacuum manifold system for extraction or cleanup. Each unit consists of 6 transfer lines with a stainless steel weight on one end, and a color-coded screw fitting and polyethylene terephthalate (PET) adapter on the opposite end.

Description	qty.	cat.#	price
Resprep Sample Delivery System	6-pk.	26250	

## ChromaBLOGraphy

Topical and timely insights from top chromatographers.

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### Resprep®-C18 and Resprep®-C8 SPE Disks

- Glass fiber disks embedded with C18 or C8 bonded silica.
- Extract semivolatiles organic compounds.
- Deep-pore design reduces clogging and allows faster flow rates.
- Meet requirements for EPA Methods 525.1, 506, 550.1, and 549.1.
- Lower cost than Teflon® disks.

Description	Porosity	qty.	cat.#	price
Resprep-C8	47mm	24-pk.	24048	
Resprep-C18	47mm	20-pk.	24004	
Resprep-C18	90mm	12-pk.	25988	

### Resprep® Oil & Grease SPE Disks

- 47 mm glass fiber disks embedded with specialty bonded silica.
- Meet requirements for EPA Method 1664.\*
- Reduce emulsion formation and amount of solvent required by previous EPA methods.
- No chlorofluorocarbons needed.

Description	qty.	cat.#	price
Resprep Oil & Grease SPE Disks	20-pk.	26022	

\*A sodium sulfate drying tube and a 0.45 µm PTFE syringe filter (cat.# 26145, page 399) also may be used.

### Resprep® SPE Flow Filters

- Designed specifically to improve flow when filtering oil and grease samples.
- Use with Resprep® Diskcover-47 reservoir, or any 47 mm glass sample reservoir.

Description	qty.	cat.#	price
Resprep SPE Flow Filters	20-pk.	26024	

### Resprep® Resin SPE Disks

- 47 mm glass fiber disks embedded with styrene/DVB resin.
- For chlorinated, benzidine-containing, or nitrogen-containing pesticides.
- Meet requirements of EPA Methods 515.2 and 553.

Description	qty.	cat.#	price
Resprep Resin SPE Disks	20-pk.	26023	

## Parts for Diskcover-47 Extraction System

### Diskcover-47 Extraction Disk Holder

- Compatible with most vacuum manifold systems that accept 1/8-inch male luer fittings.
- Sample can be automatically introduced via 1/8-inch Teflon® tubing or from the optional Diskcover-47 reservoir.

Description	qty.	cat.#	price
Diskcover-47 Extraction Disk Holder	ea.	24020	
Diskcover-47 Extraction Disk Holder	6-pk.	24021	
Teflon Tube Luer Adaptors (1/8" OD)	6-pk.	24017	
Teflon Sample Tubing (2ft./0.6m, 1/8" OD)	6-pk.	24025	

### Diskcover-47 Reservoir\*

The Diskcover-47 open-top reservoir allows you to pour up to 125 mL of sample directly onto the filter disk holder. It easily installs on top of the Diskcover-47 extraction disk holder.

Description	qty.	cat.#	price
Diskcover-47 Reservoir	ea.	24029	
Diskcover-47 Reservoir	6-pk.	24030	
Teflon O-Ring**	ea.	24027	
Teflon O-Ring**	6-pk.	24028	

\*Must be used with the Diskcover-47 extraction disk holder.

\*\*Order when using PTFE extraction filters.

**Resprep®**



Resprep® disks & flow filters extract analytes of interest at high flow rates, and significantly reduce clogging.

also **available**

For an alternative membrane filtration system, see **page 343**.



24020



24029

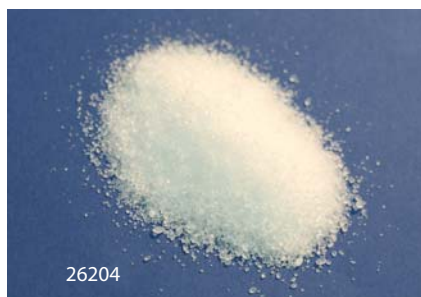
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26204

**Sodium Sulfate**

- Ideal for removing water from sample extracts.
- Requires activation before use.
- Packaged in recloseable 5 kg buckets.

Anhydrous sodium sulfate is the most common drying agent used to remove moisture from sample extracts. We package our 60 mesh material in recloseable buckets.

Description	qty.	cat.#	price
Sodium Sulfate	5kg	26204	



26135

**Florisol® PR**

- Pesticide residue grade.
- Each lot certified to meet AOAC method requirements.
- Packaged in glass containers.

Florisol® PR is commonly used to remove polar interferences from pesticide residues. This bulk material is ideal for labs packing their own chromatography columns for pesticide residue extractions.

Description	qty.	cat.#	price
Florisol PR, 60/100 mesh	500gms	26135	



26136

**Granulated Activated Copper**

- Convenient form for removing sulfur from environmental extracts.
- Acidified and activated—ready for use.

Activated copper effectively removes elemental sulfur from environmental extracts. Our acid-washed and activated material can be used right out of the package. The 30 mesh granular material eliminates the potential for fine copper particles in filtered extracts.

Description	qty.	cat.#	price
Granulated Activated Copper, 30 mesh	1kg	26136	



26137

**Ottawa Sand**

- Sample medium for matrix spikes and laboratory control blanks.
- Packaged in convenient 5 kg buckets.

Ottawa sand is listed in several US EPA methods as the specified medium for matrix spike and laboratory control blanks.

Description	qty.	cat.#	price
Ottawa Sand	5kg	26137	



26033

**Diatomaceous Earth**

- Improves extraction efficiency.
- Adsorbs moisture from samples.

Diatomaceous earth is used as a filter aid to improve extraction efficiency of densely packed soils, such as clays. By mixing the sample with diatomaceous earth, recoveries can be improved and excess moisture can be absorbed. Packaged in a convenient 1 kg quantity.

Description	Similar to Dionex part #	qty.	cat.#	price
Diatomaceous Earth, 30/40 mesh	062819	1kg	26033	

## Syringe Filters

- Variety of filter types, porosities, and diameters.
- Color coded for easy identification.
- Polypropylene housing.
- Reusable storage container.
- Quantity break pricing, for greater savings.



**Cut costs, not corners!**  
 Top quality filters at low prices!



Free sample packs of syringe filters are available by adding -248 to the catalog number when you call to place your order.

Size	Porosity	Color	qty.	cat.#	Price per 100-pack		
					1-4 packs	5-9 packs	10 or more packs
Cellulose Acetate							
13mm	0.22μm	green	100-pk.	26156			
13mm	0.45μm	blue	100-pk.	26155			
25mm	0.22μm	green	100-pk.	26158			
25mm	0.45μm	blue	100-pk.	26157			
Nylon							
13mm	0.22μm	yellow	100-pk.	26146			
13mm	0.45μm	pink	100-pk.	26147			
25mm	0.22μm	yellow	100-pk.	26148			
25mm	0.45μm	pink	100-pk.	26149			
PTFE (polytetrafluoroethylene)							
13mm	0.22μm	purple	100-pk.	26142			
13mm	0.45μm	orange	100-pk.	26143			
25mm	0.22μm	purple	100-pk.	26144			
25mm	0.45μm	orange	100-pk.	26145			
PVDF (polyvinylidfluoride)							
13mm	0.22μm	brown	100-pk.	26150			
13mm	0.45μm	red	100-pk.	26151			
25mm	0.22μm	brown	100-pk.	26152			
25mm	0.45μm	red	100-pk.	26153			

Syringe filters are for laboratory use only.



## Membrane Selection Guide

Membrane	Properties	Applications	Incompatible with
Nylon	hydrophilic, chemically resistant, low protein binding	bases, HPLC solvents, alcohols, aromatic hydrocarbons	acids, aggressive halogenated hydrocarbons, proteins
	hydrophobic, temperature resistant	organic solvents, acids, alcohols, bases, aromatics	don't use with aqueous samples without pre-wetting (to avoid high backpressure)
PTFE	hydrophobic, low protein binding	alcohols, acids, biomolecules	acids, bases, esters, ethers, ketones
PVDF	hydrophilic, low protein binding	alcohols, acids, biomolecules	acids, bases, esters, ethers, ketones
Cellulose Acetate	hydrophilic, chemically & temperature resistant	sterile applications, aqueous solutions	organic solvents

Cellulose Acetate, Nylon, PVDF—hydrophilic applications

PTFE—hydrophobic applications, resistant to acids and bases, used mostly with nonaqueous samples



## free literature

### Simplify Sample Prep and Protect Analytical Equipment Using Syringe Filters

Download your free copy from [www.restek.com](http://www.restek.com)

lit. cat.# GNFF1072



## Accelerated Solvent Extraction (ASE)

Accelerated solvent extraction is a common technique for fast and reliable extraction of organic materials from solid matrices, using EPA SW-846 Method 3545, Pressurized Fluid Extraction (PFE). Restek offers a wide range of replacement parts to keep your extraction system running smoothly.

### Replacement Parts for ASE® 200 Systems, Manufacturer's Design



Cell bodies are now serialized for easy sample identification.

#### Extraction Cell Bodies for ASE® 200 Systems

- Cell bodies are now serialized for easy sample identification.
- Choose original equipment-equivalent stainless steel, or Siltek® deactivation for improved inertness.
- Inner surfaces polished, for easier cleaning.
- Caps include frit, washer, PTFE O-ring, and threaded insert.

Extraction Cell Body	Similar to Dionex part #	Stainless Steel			Siltek Treated		
		qty.	cat.#	price	qty.	cat.#	price
1mL for ASE 200	054973	ea.	26110		ea.	26111	
5mL for ASE 200	054974	ea.	26112		ea.	26113	
11mL for ASE 200	048820	ea.	26114		ea.	26115	
22mL for ASE 200	048821	ea.	26098		ea.	26099	
33mL for ASE 200	048822	ea.	26116		ea.	26117	

#### Extraction Cell Replacement Parts for ASE® 200 Systems

Description	Similar to Dionex part #	Stainless Steel			Siltek Treated		
		qty.	cat.#	price	qty.	cat.#	price
Replacement Extraction Cell End Caps for ASE 200	049450	2-pk.	26096		2-pk.	26097	
Cap Inserts for ASE 200		2-pk.	26166				
Replacement Frits for ASE 200	049453	10-pk.	26100		10-pk.	26101	

Description	Similar to Dionex part #	qty.	cat.#	price			
Snap Rings for Caps for ASE 200	049456	10-pk.	26184				
Funnel for ASE 200	056958	ea.	26180				
PTFE O-Rings for ASE 200 & ASE 300 Caps	049457	100-pk.	26187				
Viton O-Rings for ASE 200 & ASE 300 Caps	056325	50-pk.	26188				

#### PEEK™ Washers for ASE® 200 Systems

- Meet original equipment manufacturer's performance.
- Available in 4 quantities.

Description	Similar to Dionex part #	qty.	cat.#	price
PEEK Washers for ASE 200	049454	12-pk.	25256	
		48-pk.	25257	
		250-pk.	26120	
		1,000-pk.	26229	

Save  
in bulk

#### 20 mm Filters for ASE® 200 Extraction Cells

Description	Similar to Dionex part #	qty.	cat.#	price
Cellulose Filters for ASE 200	049458	100-pk.	26118	
Cellulose Filters for ASE 200	049458	1,000-pk.	26190	
Glass Fiber Filters for ASE 200	047017	100-pk.	26119	

#### 60 mL Sample Collection Vials for ASE® 200 Systems

- Cleaned, assembled, and ready to use.
- Caps and Teflon®-lined septa included.

Description	Color	Similar to Dionex part #	qty.	cat.#	price
60mL Collection Vials for ASE 200	Clear	048784	72-pk.	26121	
60mL Collection Vials for ASE 200	Amber	048781	72-pk.	26122	
Replacement Septa (24mm x 0.125" Teflon-lined silicone)		—	100-pk.	24694	

26166

26180

26256

26119

26122

26121

## Replacement Parts for ASE® 300/100 Systems, Manufacturer's Design

### Extraction Cell Bodies for ASE® 300/100 Systems

- Cell bodies are now serialized for easy sample identification.
- Choose original equipment-equivalent stainless steel, or Siltek® deactivation for improved inertness.
- Inner surfaces polished, for easier cleaning.
- Caps include frit, washer, PTFE O-ring, and threaded insert.

Extraction Cell Body	Similar to			Stainless Steel			Siltek Treated		
	Dionex part #	qty.	cat.#	price	qty.	cat.#	price	qty.	cat.#
10mL for ASE 100	059793	ea.	26172		ea.	26173		ea.	26173
34mL for ASE 300/100	056646	ea.	26176		ea.	26177		ea.	26177
66mL for ASE 300/100	056696	ea.	26178		ea.	26179		ea.	26179
100mL for ASE 300/100	056693	ea.	26132		ea.	26133		ea.	26133



Cell bodies are now serialized for easy sample identification.

### Extraction Cell Replacement Parts for ASE® 300/100 Systems

Description	Similar to			Stainless Steel			Siltek Treated		
	Dionex part #	qty.	cat.#	price	qty.	cat.#	price	qty.	cat.#
Replacement Extraction Cell End Caps for ASE 300	056921	2-pk.	26170		2-pk.	26171		2-pk.	26171
Cap Inserts for ASE 300		2-pk.	26167						
Replacement Frits for ASE 300/100		6-pk.	26174		6-pk.	26175		6-pk.	26175

Description	Similar to			Stainless Steel			Siltek Treated		
	Dionex part #	qty.	cat.#	price	qty.	cat.#	price	qty.	cat.#
Snap Rings for Caps for ASE 300/100	056778	12-pk.	26134						
Funnel for ASE 300/100	056699	ea.	26169						
PTFE O-Rings for ASE 200 & ASE 300 Caps	049457	100-pk.	26187						
Viton O-Rings for ASE 200 & ASE 300 Caps	056325	50-pk.	26188						



### PEEK™ Washers for ASE® 300/100 Systems

- Meet original equipment manufacturer's performance.
- Available in 2 quantities.

Description	Similar to Dionex part #	12-pk.	48-pk.
PEEK Washers for ASE 300/100	061687	25393	25394



### 30 mm Filters for ASE® 300/100 Extraction Cells

Description	Similar to Dionex part #	qty.	cat.#	price
Cellulose Filters for ASE 300/100	056780	100-pk.	26168	
Glass Fiber Filters for ASE 300/100	056781	100-pk.	26189	



### 250 mL Sample Collection Bottles for ASE® 300/100 Systems

- Cleaned, assembled, and ready to use.
- Caps and Teflon®-lined septa included.

Description	Color	Similar to Dionex part #	qty.	cat.#	price
250mL Collection Bottles for ASE 300/100	Clear Glass	056284	12-pk.	26191	
250mL Collection Bottles for ASE 300/100	Amber Glass	—	12-pk.	26260	
Replacement Septa (24mm x 0.125" Teflon-lined silicone)		—	100-pk.	24694	



also **available**

**Diatomaceous Earth and Sodium Sulfate**  
 See page 398.



26161

26162

#### Autoseal Tip Assembly for ASE® 200/300 Systems

- Meets original equipment manufacturer's performance.
- Choose original equipment-equivalent stainless steel, or Siltek® deactivation for improved inertness and extended lifetime.

Description	Similar to Dionex part #	Stainless Steel		Siltek Treated		
		qty.	cat.#	price	qty.	cat.# price
Autoseal Tip Assembly for ASE 200	048811	ea.	26162		ea.	26161
Autoseal Tip Assembly for ASE 300	056641	ea.	26246		ea.	26247



26160

26159

#### Valves for ASE® 100/200/300 Systems

- Fits ASE® 100, 200, 300 systems.
- Meets original equipment manufacturer's performance.

Description	Similar to Dionex part #	qty.	cat.#	price
Pressure Relief Valve for ASE 100/200/300	048889	ea.	26159	
Static Valve for ASE 100/200/300	048778	ea.	26160	



26251



#### Tubing Assembly for ASE® 200/300 Systems

- Great value and improved design.
- Eliminates the need for the adaptor fitting on the static and purge valves.

Description	Similar to Dionex part #	qty.	cat.#	price
Tubing Assembly for ASE 200	049311	ea.	26251	
Tubing Assembly for ASE 300	057059	ea.	26248	



23998



#### Cell Organizer for ASE® Parts

- Convenient storage of extraction cell parts and consumables.
- 13 open bins provide easy visibility and organization for small and large pieces.
- Small footprint conserves valuable lab bench and drawer space.

Description	qty.	cat.#	price
Cell Organizer for ASE Parts, blue 13-bin unit, 12"L x 12"H x 7.5"D	ea.	23998	



23996



#### Carrier Basket for ASE® Cells

- Sturdy stainless steel construction to carry full or empty ASE® cells and caps.
- Can hold twelve complete 33 mL cell assemblies and more of smaller sizes.

Description	qty.	cat.#	price
Carrier Basket for ASE Cells	ea.	23996	



**Resprep® Tools** for ASE® Systems

- Use to insert filter in extraction cell or O-ring in cell cap.
- Fits all extraction cells, except 1 mL size.

**2-in-1 Filter/O-Ring Insertion Tool Kit for ASE® 100/200/300**

Inserting a Filter (ASE® 100/200/300 systems)

Using Filter Insertion Attachments on Resprep® Tool Handle.



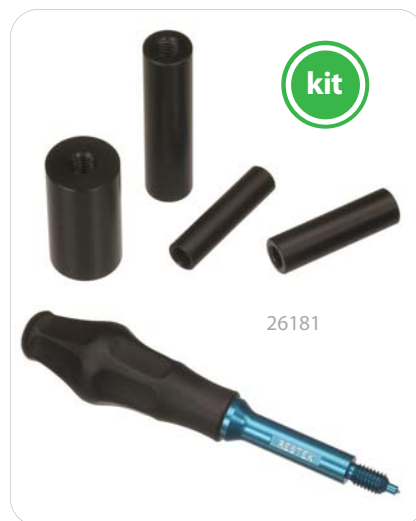
Screw the appropriate size attachment onto the end of the Resprep® Tool Handle.



Place a filter at the top of the extraction cell.



Push the filter to the bottom of the extraction cell.



26181

Inserting an O-Ring (ASE® 100/200/300 systems)

Using Resprep® Tool Handle.



Place the O-ring over the tip of the tool.



Insert the tool into the center hole of the extraction cell cap.



Press the tool firmly inside the cap until the O-ring snaps into place.



26182



26183

Description	qty.	cat.#	price
2-in-1 Filter/O-Ring Insertion Tool Kit for ASE 100/200/300 (includes Resprep Tool Handle and Filter Insertion Attachments)	kit	26181	
Resprep Tool Handle for ASE 100/200/300	ea.	26182	
Filter Insertion Attachments (1mL, 5mL, 11mL, 33mL) for ASE 100/200/300	4-piece set	26183	

**Retaining Ring Pliers** for ASE® 100/200/300 Systems

- Can be used for internal or external retaining rings.
- Works to remove retaining ring in all ASE® cell caps.

Description	qty.	cat.#	price
Retaining Ring Pliers for ASE 100/200/300	ea.	26185	



26185

**Cell Cleaning Brushes** for ASE® 100/200/300 Cells

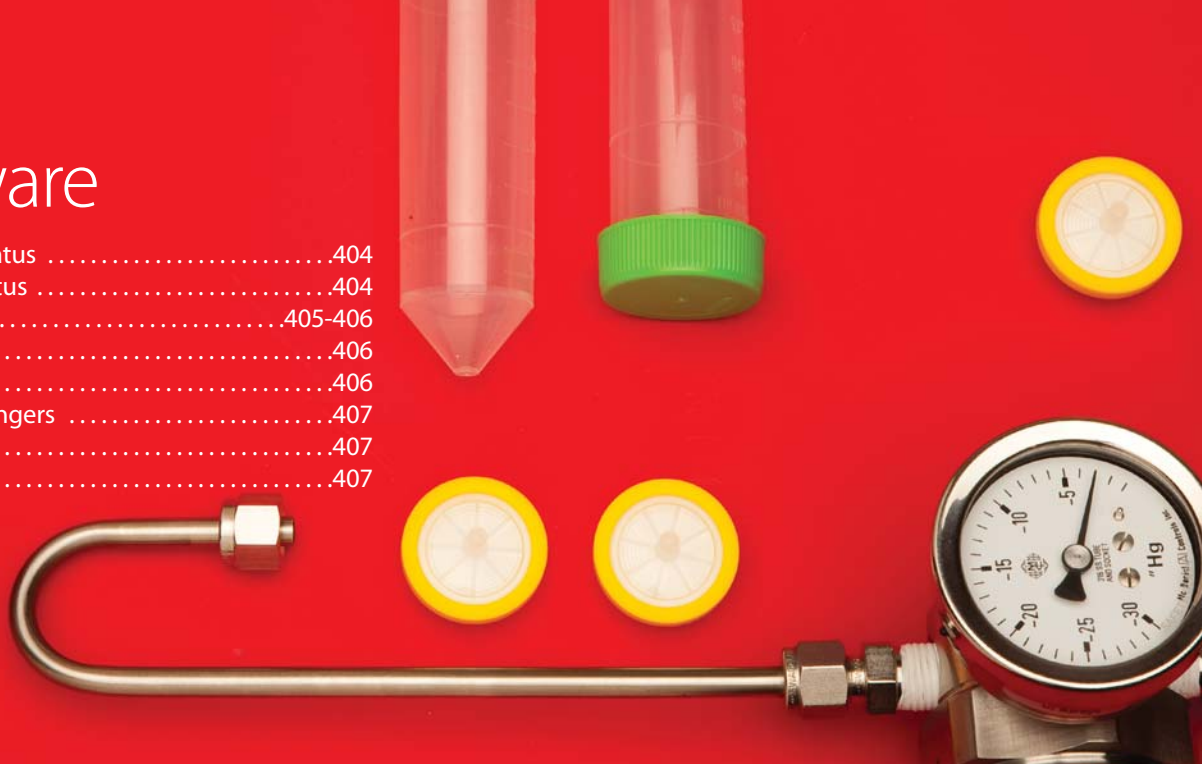
- Firm bristle brushes for easy cell cleaning and removal of solid samples.
- Range of sizes to fit all extraction cells for ASE® 100, 200, and 300.

Description	qty.	cat.#	price
Cell Cleaning Brushes	3-pk.	23999	



# Glassware

Evaporator Apparatus .....	404
Extraction Apparatus .....	404
Flasks .....	405-406
Burets .....	406
Funnels .....	406
Midget Glass Impingers .....	407
Pipets .....	407
Stopper .....	407

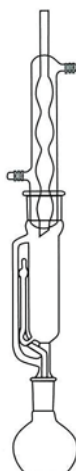


**NEW!**

23339



23341



**NEW!**

23343

## Evaporator Apparatus

### Kuderna-Danish Evaporator Concentrator

This apparatus is used to concentrate analytes from volatile solvents. Apparatus consist of a 3-ball Snyder distilling column, flask and concentrator tube. The flask and receivers are held together by ST joints and the included poly joint clamp. Concentrator tube is graduated.

Description	Volume	Receiver Capacity	qty.	cat.#	price
Kuderna-Danish Evaporator	250mL	10mL	kit	23339	
Kuderna-Danish Evaporator	500mL	15mL	kit	23340	

### Concentrator Tube

Description	Volume	Taper Size	qty.	cat.#	price
Graduated Concentrator Tube	10mL	19/22	ea.	23341	

## Extraction Apparatus

### Soxhlet Extraction Apparatus

Soxhlet extraction is used for the continuous solvent extraction of organic analytes from a solid matrix. All parts are connected with ST joints to reduce any risk of contamination. All flask joints are ST 24/40 joints.

Description	ID	Volume	Taper Size	qty.	cat.#	price
Extraction Apparatus	30mm	125mL	34/45	kit	23342	
Extraction Apparatus	40mm	250mL	45/50	kit	23343	
Extraction Apparatus	50mm	300mL	55/50	kit	23344	

## Flasks

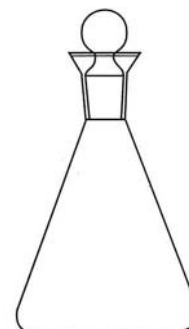
### Erlenmeyer Flasks w/Stopper

ST outer joint.

Description	Volume	Taper Size	qty.	cat.#	price
Erlenmeyer Flask w/Stopper	125mL	24/40	ea.	23345	
Erlenmeyer Flask w/Stopper	250mL	24/40	ea.	23346	
Erlenmeyer Flask w/Stopper	500mL	24/40	ea.	23347	
Erlenmeyer Flask w/Stopper	1,000mL	24/40	ea.	23348	



23345



23350

### Erlenmeyer Flasks w/Stopper, Iodine Style

Full length ST joint, funnel top and hollow stopper with closed bottom.

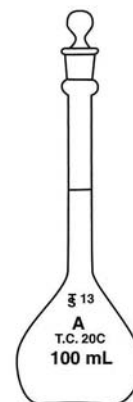
Description	Volume	Taper Size	qty.	cat.#	price
Erlenmeyer Flask w/Stopper, Iodine Style	125mL	24/40	kit	23349	
Erlenmeyer Flask w/Stopper, Iodine Style	250mL	24/40	kit	23350	
Erlenmeyer Flask w/Stopper, Iodine Style	500mL	24/40	kit	23351	\$54

### Volumetric Flasks, Class A, ST Stopper

Calibrated to contain, with marking spot and ST stopper. Precision grade and “unserialized” flasks which meet the requirements for type 1, Class A, Federal Specification NNN-F-289 and ASTM Specification E 288.

Description	Volume	Taper Size	qty.	cat.#	price
Volumetric Flask w/Stopper	1mL*	ST# 9	ea.	23359	
Volumetric Flask w/Stopper	5mL	ST# 9	ea.	23360	
Volumetric Flask w/Stopper	10mL	ST# 9	ea.	23362	
Volumetric Flask w/Stopper	25mL	ST# 9	ea.	23363	
Volumetric Flask w/Stopper	50mL	ST# 9	ea.	23364	
Volumetric Flask w/Stopper	100mL	ST# 13	ea.	23365	
Volumetric Flask w/Stopper	200mL	ST# 16	ea.	23366	
Volumetric Flask w/Stopper	250mL	ST# 16	ea.	23367	
Volumetric Flask w/Stopper	500mL	ST# 19	ea.	23368	
Volumetric Flask w/Stopper	1000mL	ST# 22	ea.	23369	

\*The 1mL is test tube shaped and not guaranteed to the Class A accuracy.



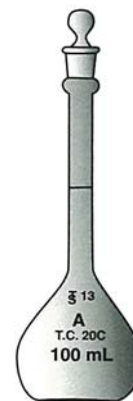
23365



### Volumetric Flasks, Class A, ST Stopper, Amber

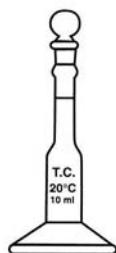
Calibrated to contain, with marking spot and ST stopper. Amber stain process provides protection to light-sensitive liquids. Meet the requirements for type 1, Class A, Federal Specification NNN-F-289 and ASTM Specification E 288.

Description	Volume	Taper Size	qty.	cat.#	price
Volumetric Flask w/Stopper, Amber	10mL	ST# 9	ea.	23352	
Volumetric Flask w/Stopper, Amber	25mL	ST# 9	ea.	23353	
Volumetric Flask w/Stopper, Amber	50mL	ST# 9	ea.	23354	
Volumetric Flask w/Stopper, Amber	100mL	ST# 13	ea.	23355	
Volumetric Flask w/Stopper, Amber	250mL	ST# 16	ea.	23356	
Volumetric Flask w/Stopper, Amber	500mL	ST# 19	ea.	23357	
Volumetric Flask w/Stopper, Amber	1000mL	ST# 22	ea.	23358	



23355





23374

## Flasks *cont'd*

### Micro Volumetric Flask, Class A, ST Stopper

The 1 through 5 mL sizes conform to the recommendations of the Committee on Microchemical Apparatus, Analytical Division of the A.C.S., in their 1956 report. Sizes 10 through 50 mL have necks of special design, to allow pipetting to the very bottom of the flask. The wide base gives much greater support to the flask.

Description	Volume	Taper Size	qty.	cat.#	price
Micro Volumetric Flask w/Stopper	1mL	ST# 8	kit	23370	
Micro Volumetric Flask w/Stopper	2mL	ST# 8	kit	23372	
Micro Volumetric Flask w/Stopper	5mL	ST# 8	kit	23373	
Micro Volumetric Flask w/Stopper	10mL	ST# 13	kit	23374	
Micro Volumetric Flask w/Stopper	25mL	ST# 13	kit	23375	
Micro Volumetric Flask w/Stopper	50mL	ST# 13	kit	23376	



23377



Squeeze-O-Matic Burets

## Burets

### Auto-Zero Burets with Teflon® Stopcock and Reservoir, Class A

Automatic, precision grade white graduations. Supplied with bottle and bulb.

Description	Volume	qty.	cat.#	price
Auto-Zero Buret w/1,000mL Reservoir	25mL	kit	23377	
Auto-Zero Buret w/2,000mL Reservoir	50mL	kit	23378	

### Squeeze-O-Matic (S-O-M) Buret with Poly Bottle and Teflon® Plug

Description	Volume	Color	qty.	cat.#	price
S-O-M Buret, PTFE Plug	10mL	white	kit	23379	
S-O-M Buret, PTFE Plug	25mL	white	kit	23380	



23381

## Funnels

### Separatory Funnels, Squibb Type with Teflon® Stopcock

With solid ST stopper.

Description	Volume	Stopcock	qty.	cat.#	price
Separatory Funnel, Squibb Type	30mL	2 PTFE	kit	23381	
Separatory Funnel, Squibb Type	60mL	2 PTFE	kit	23382	
Separatory Funnel, Squibb Type	125mL	2 PTFE	kit	23383	
Separatory Funnel, Squibb Type	250mL	4 PTFE	kit	23384	
Separatory Funnel, Squibb Type	500mL	4 PTFE	kit	23385	
Separatory Funnel, Squibb Type	1L	4 PTFE	kit	23386	
Separatory Funnel, Squibb Type	2L	6 PTFE	kit	23387	

## Glass Impingers

### Midget Glass Impingers

Use with a sampling pump to trap air contaminants into liquid collection media, as specified in OSHA and NIOSH industrial hygiene methods. Both dispersion and fritted nozzles are available as bubblers.

Description	Volume	Taper Size	qty.	cat.#	price
Midget Glass Impinger w/Fritted Tube	30mL	24/40	kit	23388	
Midget Glass Impinger w/Dispersion Tube	30mL	24/40	kit	23389	

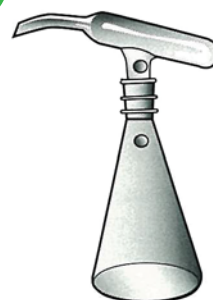


## Pipets

### Automatic, Repeating Pipets

Delivers identical amounts of liquid in rapid succession, by tilting dispenser to the rear, allowing reagent to fill the calibrated section of pipet from Erlenmeyer flask. The head and flask are held together by ST joints and the included poly joint clamp. Accuracy within 2%.

Description	Volume	Taper Size	qty.	cat.#	price
Repeating Pipet w/250mL Reservoir	1mL	24/40	kit	23390	
Repeating Pipet w/250mL Reservoir	5mL	24/40	kit	23391	
Repeating Pipet w/500mL Reservoir	10mL	24/40	kit	23392	
Repeating Pipet w/500mL Reservoir	15mL	24/40	kit	23393	
Repeating Pipet w/500mL Reservoir	20mL	24/40	kit	23394	
Repeating Pipet w/1L Reservoir	25mL	24/40	kit	23395	



23392

## Stopper

### ST Hollow Stopper

Pennyhead, full length glass apparatus stopper with closed bottom.

Description	Taper Size	qty.	cat.#	price
ST Hollow Stopper	24/40	ea.	23338	



23338



# Catch the Buzz

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