

# Sample Preparation





## Sample Preparation

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## SPE Cartridges



All cartridges are polypropylene and have polyethylene frits unless otherwise noted.



### free sample

Free sample packs of SPE cartridges are available by adding -248 to the catalog number.



**Lydia Nolan**  
Innovations Chemist  
10+ years of service!

### 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/200mg (50-pk.)	3mL/500mg (50-pk.)	6mL/500mg (30-pk.)	6mL/1000mg (30-pk.)	6mL/1000mg (100-pk.)
Florisol® (EPA SW 846 methods and CLP protocols)	—	24031	—	24034	26205
Silica (EPA SW 846 methods)	—	24032*	26086**	26085**	—
	—	24035	—	24038	—
	—	24036*	—	—	—

\*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, propyl	26056	—	26057	—	—
SCX, benzene	—	26058	—	26059	26060
WAX, NH <sub>2</sub> , primary amine	26050	26051	26052	26053	—
WCX, COOH, carboxylic acid	26061	—	26062	—	—

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.)
CL18 (high load, endcapped)	26030	26031	24050	24052	24051	26034	26035
C8 (high load, endcapped)	26036	26037	26038	26039	26040	—	—
Cyclohexyl (endcapped)	—	—	—	—	26043	—	—

### Resprep™ SPE Cartridges: Polymeric 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

### CarboPrep™ SPE Cartridges

- Improved recovery of sulfonyleurea 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 and 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 90m<sup>2</sup>/g, CarboPrep™ 200 has a surface area of 200m<sup>2</sup>/g. Both have higher capacity than silica-based packings for a variety of compounds.

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

SPE Cartridge	Tube Volume, Bed Weight	qty.	cat#
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

### CarboPrep™ Reversing SPE Cartridges

- High adsorbent capacity (surface area ~ 200m<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.
- 500mg bed weight (100mg and 900mg 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#
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.

### Closed End SPE Cartridge: Activated Sodium Sulfate

- High quality anhydrous sodium sulfate.
- Approximately 1gram 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 small volumes of 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#
Activated Sodium Sulfate	1000mg	50-pk.	26207

for **more** info

For cartridge components, see **page 373**.

**new!**



please **note**

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

**new!**



## SPE Cartridges

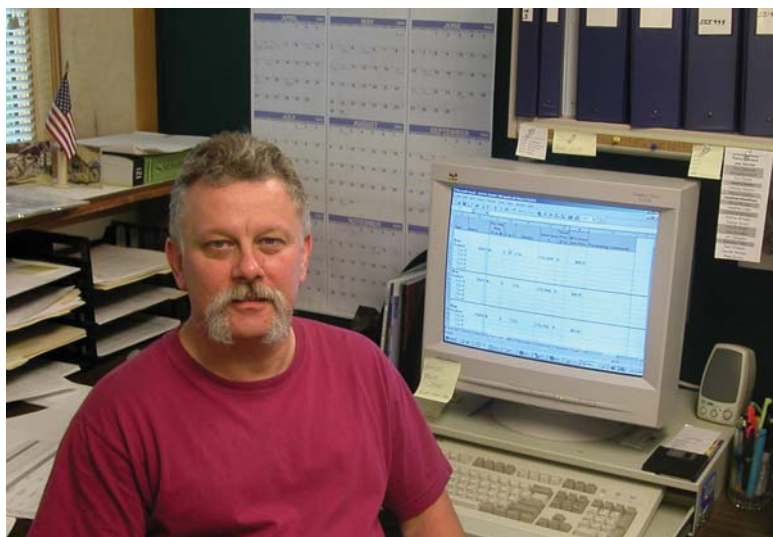
### Method Specific SPE Cartridges

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

Description	Applications	Tube Volume, Bed Weight	qty.	cat.#
Massachusetts EPH	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
EPA Method 521	For use in EPA Method 521: Nitrosamines in Drinking Water. This method calls for large volume injection and CI/MS/MS. Activated charcoal packing for NDMA.	6mL, 2g	30-pk.	26032
EPA Method 548.1	Extraction of endothal from aqueous samples. Weak anion exchange resin (BioRex 5) packing.	6mL	30-pk.	26063
EPA Method 549.2 (Ultra Quat SPE)	For use in HPLC analysis of paraquat/diquat. For an HPLC column developed specifically for this application, see the Ultra HPLC columns pages of this catalog.	6mL, 500mg	30-pk.	25499
EPA Method 552.1	Extraction of haloacetic acids from aqueous samples. Strong anion exchange resin (Ag 1x8) packing.	1mL	100-pk.	26064
EPA Method 8321 (AH SPE)	For use in HPLC analysis of phenoxy acid herbicides.	6mL, 500mg	30-pk.	26029
Organo Tin	High-capacity clean-up of butyl and phenyl tin compounds from soil, water, and biota. Mixed bed.	60mL	16-pk.	24049
Drug Prep I	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
Drug Prep II	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
GHB <b>new!</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
RDX	Extraction of explosive compounds (similar to EPA Method 8095 and 8330 list) from water samples.	6mL, 500mg	30-pk.	26093

### free sample

Free sample packs of SPE cartridges are available by adding -248 to the catalog number.



Perry Cahoon, Buyer/Planner

**QuEChERS SPE Tubes**

- Fast, simple sample cleanup.
- Fourfold increases in sample throughput.
- Fourfold decreases in material cost.
- Convenient, ready to use centrifuge tubes with ultra pure, preweighed adsorbent mixes.

**Quick, Easy, Cheap, Effective, Rugged, and Safe**, the QuEChERS (“catchers”) method, developed by the USDA Eastern Regional Research Center<sup>1</sup>, has become very popular for extraction and clean-up of pesticide residue samples. Our products are available in two dispersant-centrifuge tube sizes to meet the needs of a wide variety of sample matrices.

AOAC Method 2007.1	Benefits/Uses	qty.	cat#
<b>2mL QuEChERS SPE Micro-Centrifuge Tube</b> Contains 150mg Magnesium Sulfate and 50mg PSA	Cleanup of agricultural produce extracts, 1mL sample volume.	100-pk.	26124
<b>2mL QuEChERS SPE Micro-Centrifuge Tube</b> Contains 150mg Magnesium Sulfate, 50mg PSA, and 50mg Graphitized Carbon	Cleanup of 1mL sample extract with residual pigments and sterols.	100-pk.	26123
<b>2mL QuEChERS SPE Micro-Centrifuge Tube</b> Contains 150mg Magnesium Sulfate, 50mg PSA, and 50mg C18	Cleanup of 1mL sample extract with residual fat.	100-pk.	26125
<b>15mL QuEChERS SPE Centrifuge Tube</b> Contains 900mg Magnesium Sulfate, 300mg PSA, and 150mg Graphitized Carbon	Cleanup of 6mL sample extract with residual pigments and sterols.	50-pk.	26126

1. Anastassiades, M., S.J. Lehotay, D. Stajnbaher, F.J. Schenck, "Fast and Easy Multiresidue Method Employing Acetonitrile Extraction/Partitioning and "Dispersive Solid-Phase Extraction" for the Determination of Pesticide Residues in Produce", *J AOAC International*, 2003, vol 86 no 22, pp 412-431.

Reference not available from Restek.



cat.# 26123

cat.# 26124

cat.# 26126

also **available**

Custom adsorbent mix combinations available upon request.

SAMPLE PREPARATION

**Pesticide Residue Cleanup SPE Cartridges**

- Convenient, multiple adsorbent beds in a single cartridge.
- For use in multiple-residue pesticide analysis, to remove matrix interferences.

SPE Cartridge	qty.	cat#
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



cat.# 26194



cat.# 26195



cat.# 26128

**did you know?**

**Multiple sorbents are used to extract different types of interferences.**

MgSO <sub>4</sub>	removes excess water
PSA*	removes sugars, fatty acids, organic acids, and anthocyanine pigments
C18	removes nonpolar interferences
Carbon	removes pigments, sterols, and nonpolar interferences

\*PSA—primary and secondary amine exchange material.

## Bulk Adsorbents

new!

**Sodium Sulfate**

- Ideal for removing water from sample extracts.
- Requires activation before use.
- Packaged in recloseable 5kg 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.#
Sodium Sulfate	5kg	26204

**Florisil® PR**

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

Florisil® 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.#
Florisil® PR, 60/100 mesh	500gms	26135

**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.#
Granulated Activated Copper, 30 mesh	1kg	26136

**Ottawa Sand**

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

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

Description	qty.	cat.#
Ottawa Sand	5kg	26137

**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. We package our 30/40 mesh material in a convenient 1kg quantity.

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



**Rebecca Reed**  
Customer Service  
Representative  
9+ years of service!



## 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	qty.	cat.#
Resprep™-C8 47mm SPE Disks	24-pk.	24048
Resprep™-C18 47mm SPE Disks	20-pk.	24004
Resprep™-C18 90mm SPE Disks	12-pk.	25988

## Resprep™ Oil & Grease SPE Disks

- 47mm 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.#
Resprep™ Oil & Grease SPE Disks	20-pk.	26022

\*A sodium sulfate drying tube and a 0.45µm PTFE syringe filter (cat.# 26145, page 373) 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 47mm glass sample reservoir.

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

## Resprep™ Resin SPE Disks

- 47mm 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.#
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.#
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 125mL of sample directly onto the filter disk holder. It easily installs on top of the Diskcover-47 extraction disk holder.

Description	qty.	cat.#
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™ 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 349](#).



# Resprep™ SPE Manifolds, Vacuum/Pressure Unit



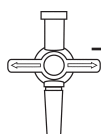
Resprep™ 12-Port SPE Manifold

## 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.

SAMPLE PREPARATION

## Resprep™ Manifold Replacement Parts



Valve  
26083



Valve  
Attachment  
26130

### Manifold Lid



Needle  
Attachment  
26131



Sample  
Guide  
26084



Resprep™ 12-Port SPE Manifold

Replacement Manifold Lid, 12-port

Collection Rack, 12-port

### Description

Description	qty.	cat.#
Complete Resprep™ 12-Port SPE Manifold (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
Complete Resprep™ 24-Port SPE Manifold (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 and Accessories

Description	qty.	cat.#
Replacement Waste Container, 12-port <b>new!</b>	ea.	24014
<b>Collection Rack</b>		
Collection Rack, 12-port	ea.	26079
Collection Rack, 24-port	ea.	26082
<b>Manifold Lid</b>		
Replacement Manifold Lid, 12-port (sample guides not included)	ea.	26078
Replacement Manifold Lid, 24-port (sample guides not included)	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 (68kPa) vacuum or 18psi (124kPa) pressure.



Description	qty.	cat.#
Oil-Free Vacuum/Pressure Station (115V)	ea.	24002
Oil-Free Vacuum/Pressure Station (220V)	ea.	24003
Vacuum Tubing (10ft./3m, 1/4" ID)	ea.	24016

Not recommended for use with 24-port manifold; not available for 220VAC power outlets.

## Syringe Filters

- Variety of filter types, porosities, and diameters.
- Color coded for easy identification.
- Reusable storage container for 100-pk.
- 500- and 1,000- pack sizes for greater savings.



Size	Porosity	Color	100-pk. cat.#	500-pk. cat.#	1,000-pk. cat.#
<b>Nylon</b>					
13mm	0.22µm	yellow	26146		26200
13mm	0.45µm	pink	26147		26201
25mm	0.22µm	yellow	26148	26202	
25mm	0.45µm	pink	26149	26203	
<b>PTFE (polytetrafluoroethylene)</b>					
13mm	0.22µm	purple	26142		26196
13mm	0.45µm	orange	26143		26197
25mm	0.22µm	purple	26144	26198	
25mm	0.45µm	orange	26145	26199	
<b>PVDF (polyvinylidene difluoride)</b>					
13mm	0.22µm	black	26150	<b>new!</b>	26154
13mm	0.45µm	red	26151		
25mm	0.22µm	black	26152		
25mm	0.45µm	red	26153		

Nylon, PVDF - hydrophilic applications

PTFE - hydrophobic applications

## free sample

Free sample packs of syringe filters are available by adding -248 to the catalog number.

## Resprep™ SPE Tubes, Frits, & Caps

Empty Tubes (polypropylene)	Volume	qty.	cat.#
	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)	Fits Tube Volume, Diameter	qty.	cat.#
	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.#
	1mL	12-pk.	26001
	3mL	12-pk.	26002
	6mL	12-pk.	26003
	15mL	12-pk.	26004
	25mL*	12-pk.	26005
	70mL**	12-pk.	26006



Empty Tube



Frits



Tube Caps

## Resprep™ SPE Connectors & End Caps

Connectors	Fits Tube Volume	qty.	cat.#
	1, 3, 6, 15mL	12-pk.	26007
	25mL*	12-pk.	26008
	70mL**	12-pk.	26009
Female Luer End Caps	universal	12-pk.	26000



Connectors

\*For 20mL packed tubes.

\*\*For 60mL packed tubes.

## Parts for ASE® Systems

Accelerated solvent extraction has become 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. All parts are economically priced to save you money and are designed to meet or exceed the performance of the original manufacturer's parts.

For handy tools designed for use with ASE® systems, see page 377. For diatomaceous earth and sodium sulfate, see page 370.

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

(See page 376 for Restek-enhanced design extraction cell parts.)

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

- 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.

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

Description	Similar to Dionex part #	12-pk.	48-pk.	250-pk.
PEEK™ Washers for ASE® 200	049454	25256	25257	26120

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

- Cellulose or glass fiber construction.
- Cellulose filters available in economical 1000-packs.

Description	Similar to Dionex part #	qty.	cat.#
Cellulose Filters for ASE® 200	049458	100-pk.	26118
Cellulose Filters for ASE® 200	049458	1000-pk.	26190
Glass Fiber Filters for ASE® 200	047017	100-pk.	26119

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

- Cleaned, assembled, and ready to use.
- Clear or amber glass.
- Caps and Teflon®-lined septa included.

Description	Similar to Dionex part #	qty.	cat.#
60mL Collection Vials, Clear Glass, for ASE® 200	048784	72-pk.	26121
60mL Collection Vials, Amber Glass, for ASE® 200	048781	72-pk.	26122
Replacement Septa for 20, 40 & 60mL Vials and 250mL Bottles (24mm Teflon®-lined 0.125" silicone septa)	—	100-pk.	24694



Cap Inserts for ASE® 200



Funnel for ASE® 200



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

For handy tools designed for use with ASE® systems, see page 377. For diatomaceous earth and sodium sulfate, see page 370.

**Extraction Cell Parts for ASE® 300/100 Systems**

- 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.

Description	Similar to Dionex part #	Stainless Steel		Siltek® Treated	
		qty.	cat.#	qty.	cat.#
Extraction Cell Body for ASE® 100, 10mL	059793	ea.	26172	ea.	26173
Extraction Cell Body for ASE® 300/100, 34mL	056646	ea.	26176	ea.	26177
Extraction Cell Body for ASE® 300/100, 66mL	056696	ea.	26178	ea.	26179
Extraction Cell Body for ASE® 300/100, 100mL	056693	ea.	26132	ea.	26133
Replacement Extraction Cell End Caps for ASE® 300	056921	2-pk.	26170	2-pk.	26171
Cap Inserts for ASE® 300		2-pk.	26167		
Replacement Frits for ASE® 300/100		6-pk.	26174	6-pk.	26175

Description	Similar to Dionex part #	qty.	cat.#
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



Cap Inserts for ASE® 300



Funnel for ASE® 300



PTFE O-Rings for ASE® 200/300



Viton® O-Rings for ASE® 200/300

**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



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

- Cellulose or glass fiber construction.

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



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

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

Description	Similar to Dionex part #	qty.	cat.#
250mL Collection Bottles, Clear Glass, for ASE® 300/100	056284	12-pk.	26191
Replacement Septa for 20, 40 & 60mL Vials and 250mL Bottles (24mm Teflon®-lined 0.125" silicone septa)	—	100-pk.	24694





- Choose stainless steel or Siltek® deactivation for improved inertness.
- Caps include frit, PEEK™ seal, and PTFE O-ring.



### please note

Resprep™ designed parts are not interchangeable with Dionex designed parts.



## Replacement Parts for ASE® 200 Systems, Restek Enhanced Design

### Resprep™ Extraction Cell Parts for ASE® 200 Systems, Restek Enhanced Design

- Simpler design with fewer parts.
- Faster installation.
- Easier cleaning.
- More cost effective than original equipment design.

To simplify replacing the frit and PEEK™ washer in the ASE® 200 extraction cell cap, we developed an enhanced cell design that eliminates the snap ring. The frit presses snugly into a groove in a PEEK™ washer design that fits into a recessed cavity in the enhanced extraction cell.

These Restek replacement parts will keep your extraction system running smoothly. All parts are economically priced to save you money and are designed to meet or exceed the performance of the original manufacturer's parts.

Description	Stainless Steel		Siltek® Treated	
	qty.	cat.#	qty.	cat.#
Extraction Cell Kit, Resprep™ for ASE® 200, 1mL	kit	25980	kit	25981
Extraction Cell Kit, Resprep™ for ASE® 200, 5mL	kit	25982	kit	25983
Extraction Cell Kit, Resprep™ for ASE® 200, 11mL	kit	25984	kit	25985
Extraction Cell Kit, Resprep™ for ASE® 200, 22mL <b>new!</b>	kit	25976	kit	25977
Extraction Cell Kit, Resprep™ for ASE® 200, 33mL	kit	25986	kit	25987
Extraction Cell Body, Resprep™ for ASE® 200, 1mL	ea.	25960	ea.	25961
Extraction Cell Body, Resprep™ for ASE® 200, 5mL	ea.	25962	ea.	25963
Extraction Cell Body, Resprep™ for ASE® 200, 11mL	ea.	25964	ea.	25965
Extraction Cell Body, Resprep™ for ASE® 200, 22mL <b>new!</b>	ea.	25978	ea.	25979
Extraction Cell Body, Resprep™ for ASE® 200, 33mL	ea.	25966	ea.	25967
Extraction Cell Caps, Resprep™ for ASE® 200	2-pk.	25968	2-pk.	25969
PEEK™ Seal/Frit Assembly, Resprep™ for ASE® 200	2-pk.	25970	2-pk.	25971
Frit, Resprep™ for ASE® 200	12-pk.	25972	12-pk.	25973

Description	qty.	cat.#
PEEK™ Seal, Resprep™ for ASE® 200	12-pk.	25974
PEEK™ Seal, Resprep™ for ASE® 200	48-pk.	25975
Funnel, Resprep™ for ASE® 200 <b>new!</b>	ea.	24099
PTFE O-Rings for ASE® 200 & ASE® 300 Caps	100-pk.	26187
Viton® O-Rings for ASE® 200 & ASE® 300 Caps	50-pk.	26188

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

- Cellulose or glass fiber construction.
- Cellulose filters available in economical 1000-packs.

Description	Similar to Dionex part #	qty.	cat.#
Cellulose Filters for ASE® 200	049458	100-pk.	26118
Cellulose Filters for ASE® 200	049458	1000-pk.	26190
Glass Fiber Filters for ASE® 200	047017	100-pk.	26119

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

- Cleaned, assembled, and ready to use.
- Clear or amber glass.
- Caps and Teflon®-lined septa included.

Description	Similar to Dionex part #	qty.	cat.#
60mL Collection Vials, Clear Glass, for ASE® 200	048784	72-pk.	26121
60mL Collection Vials, Amber Glass, for ASE® 200	048781	72-pk.	26122
Replacement Septa for 20, 40 & 60mL Vials and 250mL Bottles (24mm Teflon®-lined 0.125" silicone septa)	—	100-pk.	24694

**Resprep™ Tools for ASE® Systems**

- Specialized tools that simplify routine chores.
- Use with ASE® 100, ASE® 200, or ASE® 300 systems.

**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.



2-in-1 Filter/O-Ring Insertion Tool Kit

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.



Resprep™ Tool Handle



Filter Insertion Attachments

**Description**

Description	qty.	cat.#
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 for ASE® 100/200/300 (1mL, 5mL, 11mL, 33mL)	4-piece set	26183

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

**Description**

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



**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. We package our 30/40 mesh material in a convenient 1kg quantity.



**Description**

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