RESTEK®

Pure Chromatography

30 YEARS

1985–2015

Sample Preparation

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).

	3 mL/500 mg (50-pk.)	6 mL/500 mg (30-pk.)	6 mL/1,000 mg (30-pk.)	15 mL/2 g (15-pk.)
Florisil (EPA SW 846 methods and CLP protocols)	24031 24032*	26086**	24034 26085**	26228
Silica (EPA SW 846 methods)	24035 24036*		24038	

*PTFE frits
**Glass tubes with PTFE frits

24031

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

Cartridges may be processed by any one or all of these techniques: positive pressure, sidearm flask, centrifuge, or vacuum manifold.

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).

	1 mL/100 mg (100-pk)	3 mL/200 mg (50-pk.)	3 mL/500 mg (50-pk.)	6 mL/500 mg (30-pk.)	6 mL/1,000 mg (30-pk.)	60 mL/10 g (16-pk.)
C18 (high load, endcapped)	26030	26031	24050	24052	24051	26035

26030

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#
Activated Sodium Sulfate	2 g	50-pk.	26207


26207

CarboPrep® Reversing SPE Cartridges

- High adsorbent capacity (surface area ~200 m^2/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.

Reversing cartridge design allows convenient inverted elution of strongly retained analytes using minimum solvent volumes. Ideal design for extraction of pesticides in water.[1]

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

[1]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

26091

Excellent for Pesticide Residue Cleanup!

Resprep® 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 and ensures reproducible performance.
- Excellent performance removing pigments from samples.

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^2/g, and CarboPrep® 200 has a surface area of 200 m^2/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 to remove matrix interferences, including highly pigmented materials.

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

26194

26128

Pesticide Residue Cleanup SPE Cartridges

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

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

PSA–primary and secondary amine

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.#
EPH Fractionation	Separation of aliphatic and aromatic hydrocarbons into distinct extract fractions. Specially treated to reduce contaminants and increase capacity. Silica packing.	20 mL, 5 g	15-pk.	26065
EPA Methods 521 & 522	For use in EPA Method 521: Nitrosamines in Drinking Water and EPA Method 522 for 1,4-Dioxane in Drinking Water. Activated charcoal packing.	6 mL, 2 g	30-pk.	26032
EPA Method 548.1	Extraction of endothall from aqueous samples. Weak anion exchange resin (BioRex 5) packing.	6 mL	30-pk.	26063
Ultra Quat SPE	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 183.	6 mL, 500 mg	30-pk.	25499
Organo Tin	High-capacity cleanup of butyl and phenyl tin compounds from soil, water, and biota. Mixed bed.	60 mL	16-pk.	24049
RDX	Extraction of explosive compounds (similar to EPA Method 8095 and 8330 list) from water samples.	6 mL, 500 mg	30-pk.	26093

Resprep® SPE Tube Parts & Accessories

Empty Tubes (polypropylene)	Volume	qty.	cat.#
	1 mL	50-pk.	26010
	3 mL	50-pk.	26011
	6 mL	50-pk.	26012
	15 mL	50-pk.	26013
	sample reservoir, 25 mL	12-pk.	26014
	sample reservoir, 60 mL	12-pk.	26015
Frits (polyethylene), 20 µm	**Fits Tube Volume, Diameter**	**qty.**	**cat.#**
	1 mL, 6 mm	100-pk.	26016
	3 mL, 9 mm	100-pk.	26017
	6 mL, 1.2 cm	100-pk.	26018
	15 mL, 1.6 cm	100-pk.	26019
	25 mL, 2.0 cm*	100-pk.	26020
	60 mL, 2.6 cm	100-pk.	26021
Tube Caps (polyethylene)	**Fits Tube Volume**	**qty.**	**cat.#**
	1 mL	12-pk.	26001
	3 mL	12-pk.	26002
	6 mL	12-pk.	26003
	15 mL	12-pk.	26004
	25 mL*	12-pk.	26005
Female Luer End Caps (polypropylene)	**Fits Tube Volume**	**qty.**	**cat.#**
	universal	12-pk.	26000
Connectors (polypropylene)	**Fits Tube Volume**	**qty.**	**cat.#**
	1, 3, 6 mL	12-pk.	26007
	15, 25 mL*	12-pk.	26008
	60 mL	12-pk.	26009

*For 20 mL packed tubes.

Resprep® tubes, frits, caps, and connectors for your method development needs.


26012


26018


26000


26003


26007

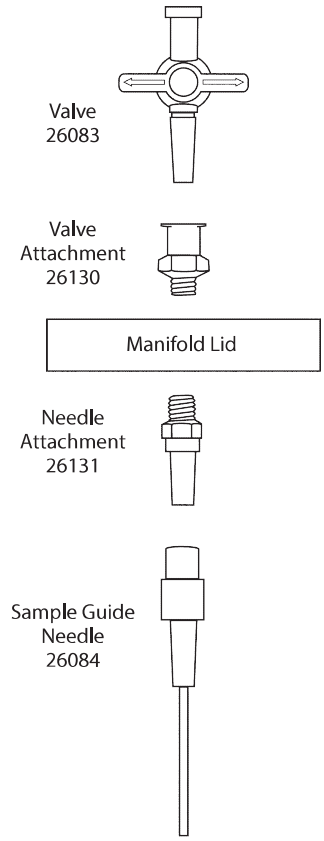
Manifolds & Replacement Parts

26077

Resprep® 12- or 24-Port SPE Manifolds

- Use with any standard male luer end SPE cartridges.
- Inert, PTFE 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 valves allow vacuum control for each cartridge, improving reproducibility.

Resprep® Manifold Replacement Parts



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

Resprep® Manifold Replacement Parts

Description	qty.	cat.#
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
Collection Rack		
Collection Rack, 12-Port	ea.	26079
Collection Rack, 24-Port	ea.	26082
Manifold Lid		
Replacement Manifold Lid (sample guides not included), 12-Port	ea.	26078
Replacement Manifold Lid (sample guides not included), 24-Port	ea.	26081
Manifold Lid Replacement Parts		
Valves, 12 or 24-Port	2-pk.	26083
Valve Attachment	48-pk.	26130
Needle Attachment	48-pk.	26131
Sample Guide Needles, 12 or 24-Port	12-pk.	26084

*Waste container (shown in tank) and top shelf for round-bottom flasks are not included in 24-port manifold kit (cat.# 26080).

24002

Oil-Free Vacuum/Pressure Station for 12-Port Resprep® SPE Systems

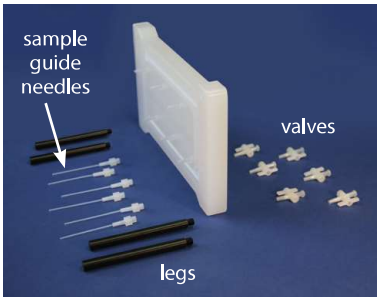
Allows switching from pressure to vacuum in a matter of seconds. Quiet, oil-free unit will not contaminate the extraction system or your samples. Provides 20" Hg (68 kPa) vacuum or 18 psi (124 kPa) pressure.

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

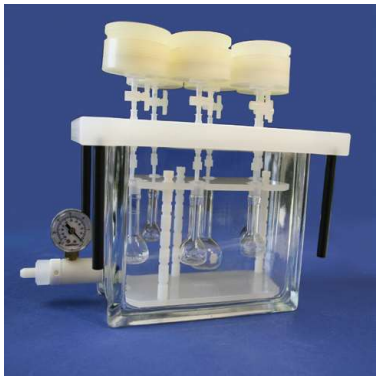
Resprep® 6-Port Disk Manifold Lid

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



Description	qty.	cat.#
Resprep 6-Port Disk Manifold Lid* Includes: polypropylene lid with 6 ports, 6 nylon valves, 6 PTFE 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
Accessories		
Glass Vacuum Chamber w/gauge & valve for Resprep manifolds, 6 or 12-Port	ea.	25991
Manifold Lid Replacement Parts		
Valves, 12 or 24-Port	2-pk.	26083
Valve Attachment	48-pk.	26130
Needle Attachment	48-pk.	26131
Sample Guide Needles, 12 or 24-Port	12-pk.	26084
Gasket, 12-port	2-pk.	24011

*Vacuum chamber (cat.# 25991) not included.



Fully assembled unit shown with glass vacuum chamber (cat.# 25991) and disk holders (cat.# 24020).

Resprep® Sample Delivery System

- Compatible with Resprep® 1, 3, 6, and 15 mL SPE cartridges and Diskcover-47 extraction disk holder (cat.# 24020).
- Six PTFE transfer lines (1/8" OD x 1/16" ID x 36" long); each is banded with a different color 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 six 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.#
Resprep Sample Delivery System	6-pk.	26250

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

Resprep®-C18 and Resprep®-C8 SPE Disks

- Glass fiber disks embedded with C18 or C8 bonded silica.
- Extract semivolatile 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 PTFE disks.

Description	Diameter	qty.	cat.#
Resprep-C8	47 mm	24-pk.	24048
Resprep-C18	47 mm	20-pk.	24004
Resprep-C18	90 mm	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.#
Resprep Oil & Grease SPE Disks	20-pk.	26022

*A sodium sulfate drying tube (cat.# 26207, page 397) and a 0.45 µm PTFE syringe filter (cat.# 26145, page 408) also may be used.

26024

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.#
Resprep SPE Flow Filters	20-pk.	26024

26023

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.#
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 PTFE 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
PTFE Tube Luer Adaptors (1/8" OD)	6-pk.	24017
PTFE Sample Tubing (2 ft./0.6 m, 1/8" OD)	6-pk.	24025

24020

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.#
Diskcover-47 Reservoir	ea.	24029
Diskcover-47 Reservoir	6-pk.	24030

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

24029

Sodium Sulfate (Bulk Adsorbent)

- Ideal for removing water from sample extracts.
- Activate by heating to 400 °C for four hours 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.#
Sodium Sulfate	5 kg	26204

Florisil® PR (Bulk Adsorbent)

- Pesticide residue grade.
- 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 extraction cartridges for pesticide residue extractions.

Description	qty.	cat.#
Florisil PR, 60/100 mesh	500 g	26135

Granulated Activated Copper (Bulk Adsorbent)

- 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	1 kg	26136

Ottawa Sand (Bulk Adsorbent)

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

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

Description	qty.	cat.#
Ottawa Sand	5 kg	26137

Diatomaceous Earth (Bulk Adsorbent)

- 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.#
Diatomaceous Earth, 30/40 mesh	062819	1 kg	26033

Q-sep®

QuEChERS Products

Ideal for multiresidue pesticide analysis from food and other matrices.

Restek Q-sep® QuEChERS Products

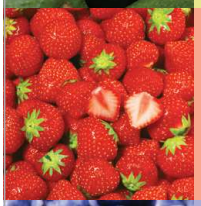
Fast, Simple Sample Prep for Multiresidue Pesticide Analysis

- Ready-to-use tubes, no glassware required.
- Preweighed, ultra-pure sorbents.
- Support original unbuffered, AOAC (2007.01), European (EN 15662), and mini-multiresidue 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.

	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 200 mL, quartz wool, funnel, water bath or evaporator	none	Ready-to-use

Selection Guide for Q-sep® QuEChERS dSPE Tubes

Commodity types and examples	AOAC 2007.01	EN 15662	Mini-multiresidue	Additional products
 **Low fat & low pigment fruits & vegetables** • Celery • Cucumber • Head lettuce • Melon	**2 mL, 100-pk.** (cat.# 26124) **15 mL, 50-pk.** (cat.# 26220)	**2 mL, 100-pk.** (cat.# 26215) **15 mL, 50-pk.** (cat.# 26223)	**2 mL, 100-pk.** (cat.# 26215)	
 **Fatty or waxy fruits & vegetables** • Cereals • Avocado • Nuts & seeds • Dairy	**2 mL, 100-pk.** (cat.# 26125) **15 mL, 50-pk.** (cat.# 26221)		**2 mL, 100-pk.** (cat.# 26216)	**15 mL, 50-pk.** (cat.# 26226) **2 mL, 100-pk.** (cat.# 26242) **15 mL, 50-pk.** (cat.# 26244)
 **Pigmented fruits & vegetables** • Strawberries • Sweet potatoes • Tomatoes	**15 mL, 50-pk.** (cat.# 26222)	**2 mL, 100-pk.** (cat.# 26217) **15 mL, 50-pk.** (cat.# 26224)	**2 mL, 100-pk.** (cat.# 26217)	**2 mL, 100-pk.** (cat.# 26123)
 **Highly pigmented fruits & vegetables** • Red peppers • Spinach • Blueberries	**2 mL, 100-pk.** (cat.# 26219)	**2 mL, 100-pk.** (cat.# 26218) **15 mL, 50-pk.** (cat.# 26225)	**2 mL, 100-pk.** (cat.# 26218)	**15 mL, 50-pk.** (cat.# 26126)
 **Universal use** Wide range of commodities, including fatty & pigmented fruits & vegetables.				**2 mL, 100-pk.** (cat.# 26243) **15 mL, 50-pk.** (cat.# 26245)
Download free instructions at **www.restek.com/quechers**	Instruction sheet# 805-01-002	Instruction sheet# 805-01-001	Instruction sheet# 805-01-001	Generic dSPE 805-01-003

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.#
Q-sep QuEChERS Extraction Kit (Original)	4 g $MgSO_4$, 1 g NaCl with 50 mL Centrifuge Tube	original unbuffered	50 packets & 50 tubes	23991
Q-sep QuEChERS Extraction Salt Packets Only (Original)	4 g $MgSO_4$, 1 g NaCl	original unbuffered	50 packets	23992
Q-sep QuEChERS Extraction Kit (EN)	4 g $MgSO_4$, 1 g NaCl, 1 g TSCD, 0.5 g DHS with 50 mL Centrifuge Tube	European EN 15662	50 packets & 50 tubes	26235
Q-sep QuEChERS Extraction Salt Packets Only (EN)	4 g $MgSO_4$, 1 g NaCl, 1 g TSCD, 0.5 g DHS	European EN 15662	50 packets	26236
Q-sep QuEChERS Extraction Kit (AOAC)	6 g $MgSO_4$, 1.5 g NaOAc with 50 mL Centrifuge Tube	AOAC 2007.01	50 packets & 50 tubes	26237
Q-sep QuEChERS Extraction Salt Packets Only (AOAC)	6 g $MgSO_4$, 1.5 g NaOAc	AOAC 2007.01	50 packets	26238
Empty 50 mL Centrifuge Tube, Polypropylene			50-pk.	26239
Empty 50 mL Centrifuge Tube, FEP			2-pk.	23997

TSCD—trisodium citrate dihydrate
DHS—disodium hydrogen citrate sesquihydrate
NaOAc—sodium acetate

Q-sep® QuEChERS dSPE Tubes for Extract Cleanup

Packaged in foil subpacks of 10 for enhanced protection and storage stability.

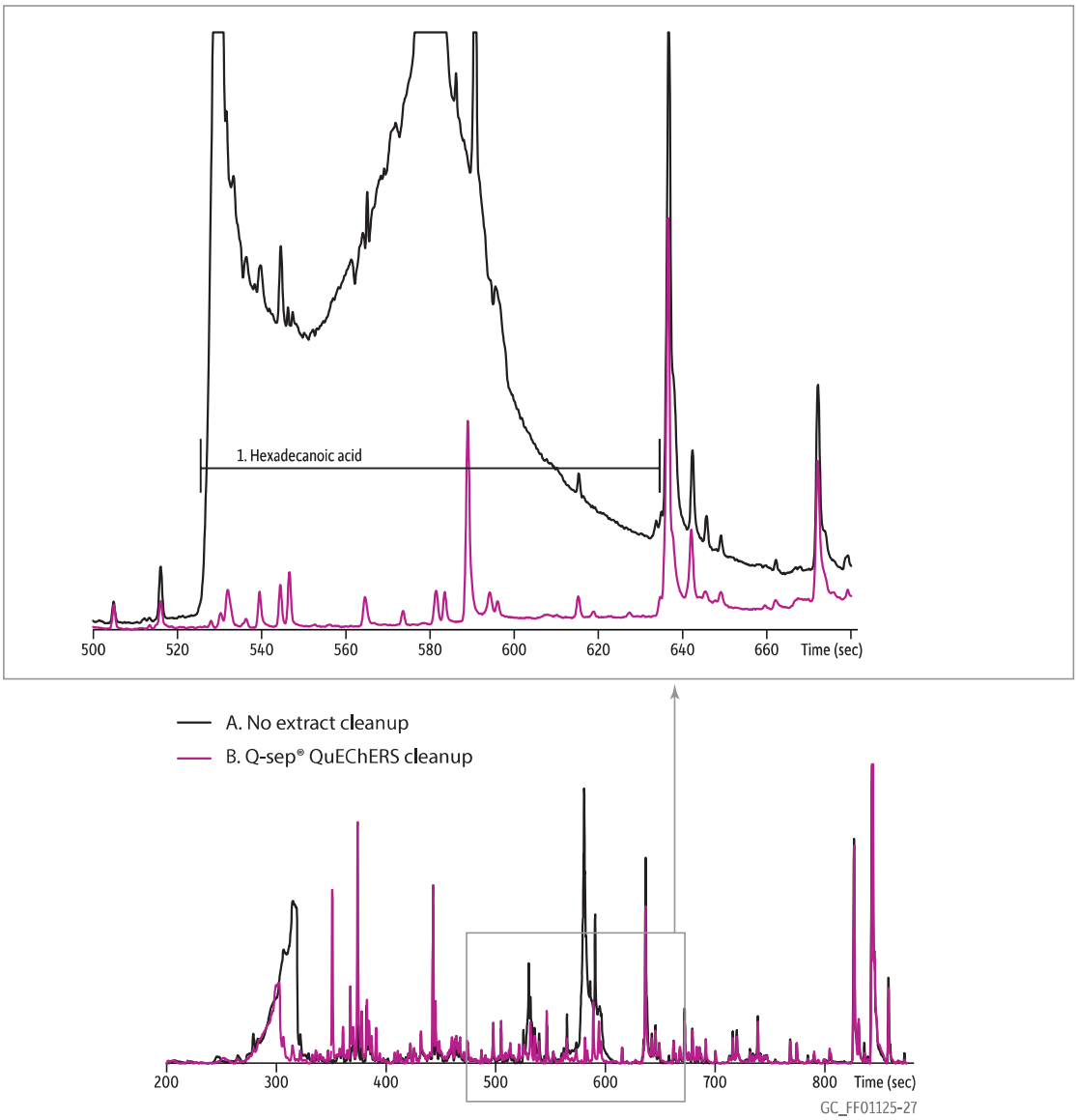
Description	Methods	qty.	cat.#
2 mL Micro-Centrifuge Tubes Prefilled with dSPE Materials for Cleanup (1 mL Extract)			
150 mg $MgSO_4$, 25 mg PSA	original unbuffered, mini-multi-residue, European EN 15662	100-pk.	26215
150 mg $MgSO_4$, 25 mg PSA, 25 mg C18	mini-multiresidue	100-pk.	26216
150 mg $MgSO_4$, 25 mg PSA, 2.5 mg GCB	mini-multiresidue, European EN 15662	100-pk.	26217
150 mg $MgSO_4$, 25 mg PSA, 7.5 mg GCB	mini-multiresidue, European EN 15662	100-pk.	26218
150 mg $MgSO_4$, 50 mg PSA	AOAC 2007.01	100-pk.	26124
150 mg $MgSO_4$, 50 mg PSA, 50 mg C18	AOAC 2007.01	100-pk.	26125
150 mg $MgSO_4$, 50 mg PSA, 50 mg GCB	AOAC 2007.01	100-pk.	26123
150 mg $MgSO_4$, 50 mg PSA, 50 mg C18, 50 mg GCB	AOAC 2007.01	100-pk.	26219
150 mg $MgSO_4$, 50 mg C18	NA	100-pk.	26242
150 mg $MgSO_4$, 50 mg PSA, 50 mg C18, 7.5 mg GCB	universal	100-pk.	26243
15 mL Centrifuge Tubes Prefilled with dSPE Materials for Cleanup (6 mL and 8 mL Extract)			
1,200 mg $MgSO_4$, 400 mg PSA	AOAC 2007.01	50-pk.	26220
1,200 mg $MgSO_4$, 400 mg PSA, 400 mg C18	AOAC 2007.01	50-pk.	26221
1,200 mg $MgSO_4$, 400 mg PSA, 400 mg C18, 400 mg GCB	AOAC 2007.01	50-pk.	26222
1,200 mg $MgSO_4$, 400 mg C18	similar to AOAC 2007.01	50-pk.	26244
900 mg $MgSO_4$, 150 mg PSA	original unbuffered, European EN 15662	50-pk.	26223
900 mg $MgSO_4$, 150 mg PSA, 15 mg GCB	European EN 15662	50-pk.	26224
900 mg $MgSO_4$, 150 mg PSA, 45 mg GCB	European EN 15662	50-pk.	26225
900 mg $MgSO_4$, 150 mg PSA, 150 mg C18	similar to European EN 15662	50-pk.	26226
900 mg $MgSO_4$, 300 mg PSA, 300 mg C18, 45 mg GCB	similar to European EN 15662	50-pk.	26245
900 mg $MgSO_4$, 300 mg PSA, 150 mg GCB	NA	50-pk.	26126

PSA—primary and secondary amine
GCB—graphitized carbon black

Multiple sorbents are used to extract different types of interferences.

$MgSO_4$	removes excess water
PSA	removes sugars, fatty acids, organic acids, and anthocyanine pigments
C18	removes nonpolar interferences
GCB	removes pigments, sterols, and nonpolar interferences

Use Q-sep® QuEChERS tubes to easily remove matrix interferences.



Column	Rxi®-5Sil MS, 20 m, 0.18 mm ID, 0.18 µm (cat.# 43602)
Sample	Sweet potato spiked with pesticide mix and extracted with acetonitrile and Q-sep® QuEChERS EN Method 15662 extraction salts
Injection	
Inj. Vol.:	1.0 µL splitless (hold 1 min)
Liner:	Single taper (4 mm) w/deact. wool (cat.# 22405)
Inj. Temp.:	250 °C
Oven	
Oven Temp.:	72.5 °C (hold 1 min) to 350 °C at 20 °C/min
Carrier Gas	He, constant flow
Flow Rate:	1.2 mL/min
Detector	MS
Mode:	
Transfer Line Temp.:	300 °C
Analyzer Type:	TOF
Ionization Mode:	EI
Acquisition Range:	45-550 amu
Instrument	Agilent/HP6890 GC
Notes	A. Extract (without cleanup step) acidified with formic acid to pH 5 B. Extract with cleanup using Q-sep® QuEChERS dSPE cleanup tube (cat.# 26124) acidified with formic acid to pH 5. Scan range: m/z 60, 73, 87, 129, 256 plotted

Q-sep® 3000 Centrifuge for QuEChERS

- Meets or exceeds requirements of original unbuffered, 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 (six), 50 mL conical tube inserts (six), 4-place 15 mL tube carriers (six), and 2 mL tube adaptors (24).

Specifications:

Motor Speed and Force Rating: 4,130 rpm, 3,000 xg
Maximum Capacity with 6-Place Horizontal Rotor: 6 x 50 mL tubes, 18 x 15 mL tubes, 24 x 2 mL tubes
Motor: 1/2 H.P. brushless DC
Nominal Acceleration Time: 45 seconds
Nominal Braking Time: 60 seconds
Timer (electronic): 1 to 30 minutes +/-1%
Requirement: 2.0 or 1.0 amps
Current Voltage Requirement: 115 or 230 (+/-10%) volts
Frequency: 50 / 60 Hz
Centrifuge Protection Breaker: 4 amp resettable
Overall Dimensions: 9" h x 14.5" w x 17" d (22.9 cm x 36.8 cm x 43.2 cm)
Weight: 39 lb (17.7 kg)

26230

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

Description	qty.	cat.#
Q-sep 3000 Centrifuge, 110V	ea.	26230
Q-sep 3000 Centrifuge, 220V	ea.	26231
Replacement Accessories		
50 mL Tube Carrier for Q-sep 3000 Centrifuge	2-pk.	26232
50 mL Conical Tube Insert for Q-sep 3000 Centrifuge	6-pk.	26249
15 mL 4-Place Tube Carrier for Q-sep 3000 Centrifuge (fits four 15 mL tubes)	2-pk.	26233
2 mL Tube Adaptors for Q-sep 3000 Centrifuge	4-pk.	26234

26232

26233

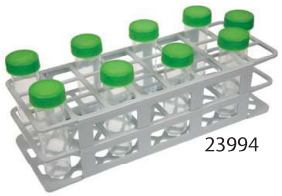
26234

26249

Q-sep® Tube Racks

- Available for 2 mL, 15 mL, and 50 mL tubes.
- Alphanumerical grid reference on top tier for easy identification of samples.
- Easy to assemble; simply fold and snap together securely.

Description	Size	Material	qty.	cat.#
Q-sep Tube Rack for 2 mL Centrifuge Tube	Holds 100	Polypropylene, White	ea.	23995
Q-sep Tube Rack for 15 mL Centrifuge Tube	Holds 60	Polypropylene, White	ea.	23993
Q-sep Tube Rack for 50 mL Centrifuge Tube	Holds 24	Polypropylene, White	ea.	23994



23994

23995

Q-sep® Bottle Top Solvent Dispenser

- Adjustment knob offers 56 output volume settings from 2.5 mL to 30 mL per stroke (0.5 mL increments)—ideal for QuEChERS methods!
- Base features 30 mm threads and includes four adaptors (25 mm, 28 mm, 38 mm, and 45 mm).
- Individually calibrated in accordance with ISO 8655 standards (certificate included) and can also be recalibrated by the user.
- PTFE, glass, and polypropylene construction for excellent chemical compatibility and 100% autoclavability.
- Integral safety discharge reduces risk of accidental dispensing, and nozzle cap prevents dripping.
- Easy to disassemble for cleaning and servicing.

Accurately and precisely dispense liquids for QuEChERS extractions with this versatile pump. A quick, simple adjustment lets you set the output volume anywhere from 2.5 mL to 30 mL per stroke, and the included adaptors will accommodate most reagent bottles.

Description	qty.	cat.#
Q-sep Bottle Top Solvent Dispenser, 2.5 mL–30 mL	ea.	23990

23990

Bottle not included.