



QuEChERS SPE Tubes for Pesticide Residue Analysis

Laboratory Equipment Magazine's 2009 Readers' Choice Awards Winner!



- Fast, simple sample extraction and cleanup using dSPE.
- 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 Center¹, has become very popular for extraction and clean-up of pesticide residue samples. Our products are available in three centrifuge tube sizes to meet the needs of both extraction and cleanup of a wide variety of sample matrices following various methods.

The researchers developed a simple two-step procedure. First, the homogenized samples are extracted and partitioned, using an organic solvent and salt solution. Then, the supernatant is further extracted and cleaned, using a dispersive SPE technique. Multiple adsorbents are placed in a centrifuge tube, along with the 1mL of organic solvent and the extracted residues partitioned from step 1. The contents are thoroughly mixed, then centrifuged, producing a clean extract ready for a variety of GC or HPLC analytical techniques.² Validation and proficiency data for the QuEChERS method are available for a wide variety of pesticides in several common food matrices at www.quechers.com

Multiple sorbents are used to extract different types of interferences.

MgSO₄ removes excess water

PSA* removes sugars, fatty acids, organic acids, and anthocyanine pigments

C18 removes nonpolar interferences

GCB* removes pigments, sterols, and nonpolar interferences

Instruction Sheets:

[805-01-003.pdf](#)

[805-01-002.pdf](#)

[805-01-001.pdf](#)

FREE sample packs available. Use these handy packs for method development or to compare with your current brand. Request yours today by adding -248 to the part number. Sample pack orders cannot be placed online—please call. Limit one sample pack per customer.

Description	Material	Method	qty.	Cat.#
50mL Centrifuge Tubes for Sample Extraction				
Resprep Q110	4g MgSO ₄ , 1g NaCl, 1g trisodium citrate dihydrate, .5g disodium hydrogencitrate sesquihydrate	Mini-Multiresidue, European EN-15662	50-pk.	26213
Resprep Q150	6g MgSO ₄ , 1.5g NaOAc	AOAC 2007.1	50-pk.	26214
Empty 50mL Centrifuge Tube--		Mini-Multiresidue, European EN-15662, AOAC 2007.1	25-pk.	26227
2mL Micro-Centrifuge Tubes for dSPE (clean-up of 1mL extract)				
Resprep Q210	150mg MgSO ₄ , 25mg PSA	Mini-Multiresidue, European EN-15662	100-pk.	26215
Resprep Q211	150mg MgSO ₄ , 25mg PSA, 25mg C18	Mini-Multiresidue	100-pk.	26216
Resprep Q212	150mg MgSO ₄ , 25mg PSA, 2.5mg GCB	Mini-Multiresidue, European EN-15662	100-pk.	26217
Resprep Q213	150mg MgSO ₄ , 25mg PSA, 7.5mg GCB	Mini-Multiresidue, European EN-15662	100-pk.	26218
Resprep Q250	150mg MgSO ₄ , 50mg PSA	AOAC 2007.1	100-pk.	26124
Resprep Q251	150mg MgSO ₄ , 50mg PSA, 50mg C18	AOAC 2007.1	100-pk.	26125
Resprep Q253	150mg MgSO ₄ , 50mg PSA, 50mg GCB	--	100-pk.	26123
Resprep Q252	150mg MgSO ₄ , 50mg PSA, 50mg C18, 50mg GCB	AOAC 2007.1	100-pk.	26219
15mL Centrifuge Tubes for dSPE (clean-up of 6mL extract)				
Resprep Q350	1200mg MgSO ₄ , 400mg PSA	AOAC 2007.1	50-pk.	26220
Resprep Q351	1200mg MgSO ₄ , 400mg PSA, 400mg C18	AOAC 2007.1	50-pk.	26221
Resprep Q352	1200mg MgSO ₄ , 400mg PSA, 400mg C18, 400mg GCB	AOAC 2007.1	50-pk.	26222
Resprep Q370	900mg MgSO ₄ , 150mg PSA	European EN-15662	50-pk.	26223
Resprep Q371	900mg MgSO ₄ , 150mg PSA, 15mg GCB	European EN-15662	50-pk.	26224
Resprep Q372	900mg MgSO ₄ , 150mg PSA, 45mg GCB	European EN-15662	50-pk.	26225
Resprep Q373	900mg MgSO ₄ , 150mg PSA, 150mg C18	--	50-pk.	26226
Resprep Q374	900mg MgSO ₄ , 300mg PSA, 150mg GCB	--	50-pk.	26126

PSA--primary and secondary amine exchange material

GCB--graphitized carbon black

References (not available from Restek)

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.

2. Schenck, F.J., SPE Cleanup and the Analysis of PPB Levels of Pesticides in Fruits and Vegetables. Florida Pesticide Residue Workshop, 2002.

Click thumbnails to see enlarged view.



26214

QuEChERS SPE Resprep™ Q150, 50mL Centrifuge Tube, Contains 6g MgSO₄, 1.5g NaOAc, 50-pk.



26227

QuEChERS SPE Empty 50mL Centrifuge Tube, 25-pk.



26124

QuEChERS SPE Resprep™ Q250, 2mL Centrifuge Tube, Contains 150mg Magnesium Sulfate and 50mg PSA, 100-pk.



26125

QuEChERS SPE Resprep™ Q251, 2mL Centrifuge Tube, Contains 150mg Magnesium Sulfate, 50mg PSA, and 50mg C18, 100-pk.



26123

QuEChERS SPE Resprep™ Q253, 2mL Centrifuge Tube, Contains 150mg Magnesium Sulfate, 50mg PSA, and 50mg Graphitized GCB, 100-pk.



26126

QuEChERS SPE Resprep™ Q374, 15mL Centrifuge Tube, Contains 900mg Magnesium Sulfate, 300mg PSA, and 150mg GCB, 50-pk.