

QuEChERS (Quick, Easy, Cheap, Effective, Rugged & Safe) offer a convenient and effective approach for determining pesticide residues in fruit, vegetables and other foods.

The Teknokroma Finisterre QuEChERS Extraction and Dispersive SPE kits permit to work with the specific methods, including:

1. Method **EN 15662** Foods and Plant Origin. Determination of Pesticide Residues using GC-MS and/or LC-MS/MS Following Acetonitrile Extraction/Partitioning and Clean-up by Dispersive SPE- QuEChERS.
2. Method **AOAC 2007.01**. Pesticide Residues in Food by Acetonitrile Extraction and partitioning with Magnesium sulfate.
3. Method **Mini-multiresidue QuEChERS**. Method for the Analysis of Pesticide Residues in Low-Fat Products. www.quechers.com. (2008)

These products make simple to prepare your food samples for analysis with:

- High recoveries
- Accurate results
- High sample throughput
- Minimal solvent use
- Less labor
- Lower costs
- Simple glassware

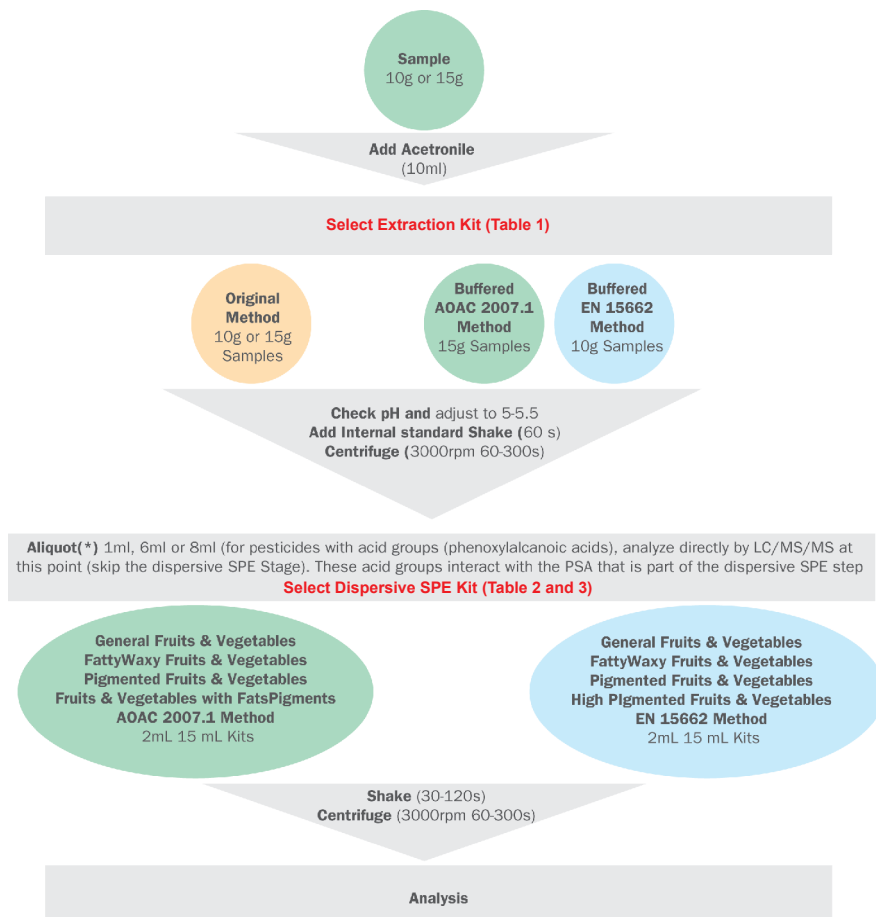
QuEChERS
Finisterre
by Teknokroma™



We offer QuEChERS extraction and dispersive SPE products in a variety of standard size and formats.

Extraction kits contain preweighed salt, so you can add them after the acetonitrile step, protecting the integrity of your sample.

Dispersive SPE kits are assembled in 2 mL and 15 mL sizes, preweighed are premixed with just the right mixture of salts and sorbents for your aliquot volume.



(recommended values)

PHASE 1: Extraction

Adding solvent and salts to a small (10 or 15 g) fruit or vegetable sample enables to extract the pesticides into the organic layer.

PHASE 1 Extraction KIT - Table 1

50mL Centrifuge Tubes for Sample Extraction

P/N	Description	Qty.	Recommended Application
TR-Q5010	4g MgSO ₄ , 1g NaCl, 1g trisodium citrate dihydrate, 0.5g disodium hydrogencitrate sesquihydrate	50	European EN-15662
TR-Q5040	6g MgSO ₄ , 1.5g NaOAc	50	AOAC 2007.01
TR-Q5020	4g MgSO ₄ , 1g NaCl	50	Mini-Multiresidue (10 g sample)
TR-Q5045	6g MgSO ₄ , 1.5g NaCl	50	Mini-Multiresidue (15 g sample)
TR-Q5030	6g MgSO ₄ , 1.5g NaCl, 1.5g sodium citrate dibasic, 750mg disodium citrate dibasic sesquihydrate	50	
TR-Q5050	6g MgSO ₄ , 1.5g NaOAc, 750mg disodium citrate sesquihydrate	50	
TR-Q5000	Empty 50mL tube	50	



PHASE 2: Dispersive SPE Clean-up

Select the dispersive SPE kit according to the type of food being analyzed and the method that you want to use. One aliquot (*) of the sample extract from Phase 1 is added to 2 mL or 15 mL centrifuge tubes (Table 2 or Table 3) containing a small quantity of SPE sorbent and MgSO₄.

PHASE 2 Dispersive SPE KIT Clean-Up - Table 2

2 mL Micro-centrifuge tubes

P/N	Description	Qty.	Aliquot (mL) (*)	Recommended Application
TR-Q2015	150mg MgSO ₄ , 25mg PSA	100	1	European EN-15662 Mini-Multiresidue
TR-Q2025	150mg MgSO ₄ , 25mg PSA, 25mg C18	100	1	European EN-15662 Mini-Multiresidue
TR-Q2035	150mg MgSO ₄ , 25mg PSA, 2.5mg GCB	100	1	European EN-15662 Mini-Multiresidue
TR-Q2045	150mg MgSO ₄ , 25mg PSA, 7.5mg GCB	100	1	European EN-15662 Mini-Multiresidue
TR-Q2055	150mg MgSO ₄ , 50mg PSA	100	1	AOAC 2007.01
TR-Q2065	150mg MgSO ₄ , 50mg PSA, 50mg C18	100	1	AOAC 2007.01
TR-Q2075	150mg MgSO ₄ , 50mg PSA, 50mg GCB	100	1	AOAC 2007.01
TR-Q2085	150mg MgSO ₄ , 50mg PSA, 50mg C18, 50mg GCB	100	1	AOAC 2007.01
TR-Q2090	150mg MgSO ₄ , 25mg C18	100	1	AOAC 2007.01
TR-Q2000	Empty 2mL Centrifuge Tube	100	1	



15 mL Centrifuge tubes - Table 3

P/N	Description	Qty.	Aliquot (mL) (*)	Recommended Application
TR-Q1590	900mg MgSO ₄ , 150mg PSA	50	6	European EN-15662
TR-Q1593	900mg MgSO ₄ , 150mg PSA, 150mg C18	50	6	European EN-15662
TR-Q1591	900mg MgSO ₄ , 150mg PSA, 15mg GCB	50	6	European EN-15662
TR-Q1592	900mg MgSO ₄ , 150mg PSA, 45mg GCB	50	6	European EN-15662
TR-Q1510	1200mg MgSO ₄ , 400mg PSA	50	8	AOAC 2007.01
TR-Q1515	1200mg MgSO ₄ , 400mg PSA, 400mg C18	50	8	AOAC 2007.01
TR-Q1516	1200mg MgSO ₄ , 400mg PSA, 400mg GCB	50	8	AOAC 2007.01
TR-Q1520	1200mg MgSO ₄ , 400mg PSA, 400mg C18, 400mg GCB	50	8	AOAC 2007.01
TR-Q1596	900mg MgSO ₄ , 150mg C18	50	6	AOAC 2007.01
TR-Q1594	900mg MgSO ₄ , 300mg PSA, 150mg GCB	50	6	---
TR-Q1595	900mg MgSO ₄ , 300mg PSA, 150mg C18	50	6	---
TR-Q1600	750mg MgSO ₄ , 250mg PSA, 250mg C18, 250 mg GCB	50	6	---

PSA= Primary and secondary exchange material

GCB= Graphitized carbon blank



Selection Guide for Dispersive Kits. Phase 2

Methods					
Types	Qt Pack	EN 15662	AOAC 2007.1	Mini Multiresidue	Others
General Fruits and Vegetables: Removes polar organic acids, some sugars and lipids					
	100 tubes 2 mL	25 mg PSA 150 mg MgSO ₄ Part N° TR-Q2015	50 mg PSA 150 mg MgSO ₄ Part No. TR-Q2055	25 mg PSA 150 mg MgSO ₄ Part No. TR-Q2015	
	50 tubes 15 mL	150 mg PSA 900 mg MgSO ₄ Part No. TR-Q1590	400 mg PSA 1200 mg MgSO ₄ Part No. TR-Q1510		
Fruits and Vegetables with Fats and Waxes: Removes polar organic acids, some sugars, more lipids and sterols					
	100 tubes 2 mL	25 mg PSA 25 mg C18 150 mg MgSO ₄ Part No. TR-Q2025	50 mg PSA 50 mg C18 150 mg MgSO ₄ Part No. TR-Q2065	25 mg PSA 25 mg C18 150 mg MgSO ₄ Part No. TR-Q2025	
	50 tubes 15 mL	150 mg PSA 150 mg C18 900 mg MgSO ₄ Part No. TR-Q1593	400 mg PSA 400 mg C18 1200 mg MgSO ₄ Part No. TR-Q1515		150 mg PSA 150 mg C18 900 mg MgSO ₄ TR-Q1593

Selection Guide for Dispersive Kits. Phase 2

Pigmented Fruits and Vegetables:

Removes polar organic acids, some sugars and lipids, and carotinoides and chlorophyll; not for use with planar pesticides

Methods

Types	Qt Pack	EN 15662	AOAC 2007.1	Mini Multiresidue	Others
	100 tubes 2 mL	25 mg PSA 2.5 mg GCB 150 mg MgSO ₄	50 mg PSA 50 mg GCB 150 mg MgSO ₄	25 mg PSA 2,5 mg GCB 150 mg MgSO ₄	50 mg PSA 50 mg GCB 150 mg MgSO ₄
		Part No. TR-Q2035	Part No. TR-Q2075	Part No. TR-Q2035	TR-Q2075
	50 tubes 15 mL	150 mg PSA 400 mg GCB 900 mg MgSO ₄	400 mg PSA 400 mg C18 1200 mg MgSO ₄		
		Part No. TR-Q1591	Part No. TR-Q1516		
	50 tubes 15 mL	150 mg PSA 45 mg GCB 900 mg MgSO ₄			300 mg PSA 150 mg GCB 900 mg MgSO ₄
		Part No. TR-Q1592			TR-Q1594

Fruits and Vegetables with Pigments and Fats:

Removes polar organic acids, some sugars and lipids, plus carotinoides and chlorophyll; not for use with planar pesticides

	100 tubes 2 mL		50 mg PSA 50 mg C18 50 mg GCB 150 Mg MgSO ₄	25 mg PSA 7,5 mg GCB 150 mg MgSO ₄	
			Part No. TR-Q2085	Part No. TR-Q2045	
	50 tubes 15 mL		400 mg PSA 400 mg C18 400 mg GCB 1200 Mg MgSO ₄		
			Part No. TR-Q1520		

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