

Qcleanup™

QuEChERS and extraction salts



Be selective



Food / Feed QC



Environment



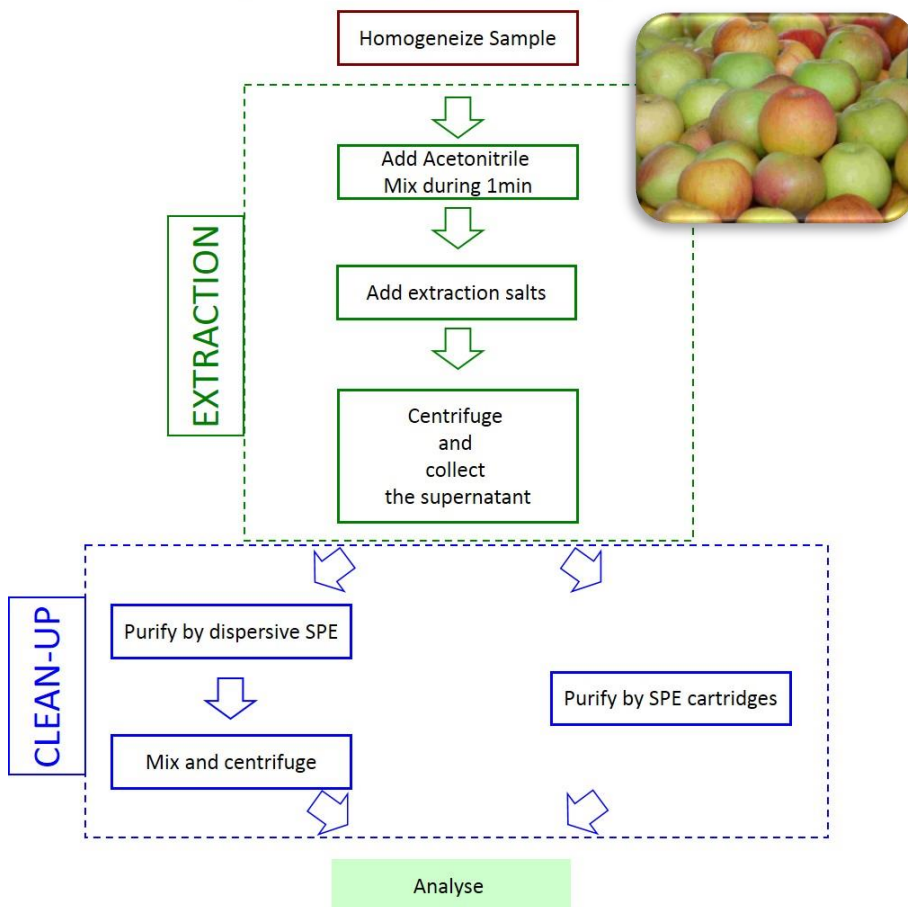
Cosmetics



Pharmaceutical
R&D

QuEChERS is a sample pretreatment initially developed by Michelangelo Anastassiades and Steven Lehotay is mainly used for the analysis of multiple pesticides into fruits and vegetables. It is the acronym of **Quick, Easy, Cheap, Effective, Rugged and Safe**. Three main methods are currently used the original method, the European standardized method EN 15662 and the AOAC official method 2007.01. Each method required an extraction process with salts and a clean-up process with SPE cartridges or by dispersive SPE.

Schematic protocol of sample preparation with QuEChERS method



AFFINISEP supplies all products required to carry out QuEChERS according to AOAC or CEN including dispersive SPE products or SPE cartridges.

Qcleanup™ products for dispersive SPE are mixtures of powder in 2mL or 15mL centrifugation tubes for main scenarios encountered during pesticide analyses. This mixture contains magnesium sulfate anhydrous (MgSO₄), primary secondary amine (PSA), carbon black (CB) or C18.

Method	Description	Nber/box	Product reference
For General Fruits & Vegetables			
EN 15662	150mg MgSO ₄ + 25mg PSA	100 tubes of 2mL	dSPE.EN.GFV.100.2
	900mg MgSO ₄ + 150mg PSA	50 tubes of 15mL	dSPE.EN.GFV.50.15
AOAC 2007.01	150mg MgSO ₄ + 50mg PSA	100 tubes of 2mL	dSPE.AOAC.GFV.100.2
	1200mg MgSO ₄ + 400mg PSA	50 tubes of 15mL	dSPE.AOAC.GFV.50.15
For Pigmented Fruits & Vegetables			
EN 15662	150mg MgSO ₄ + 25mg PSA + 2.5mg CB	100 tubes of 2mL	dSPE.EN.PFV.100.2
	900mg MgSO ₄ + 150mg PSA + 15mg CB	50 tubes of 15mL	dSPE.EN.PFV.50.15
AOAC 2007.01	150mg MgSO ₄ + 50mg PSA + 50mg CB	100 tubes of 2mL	dSPE.AOAC.PFV.100.2
	1200mg MgSO ₄ + 400mg PSA + 400mg CB	50 tubes of 15mL	dSPE.AOAC.PFV.50.15
For Highly Pigmented and Fatty Fruits & Vegetables			
EN 15662	150mg MgSO ₄ + 25mg PSA + 7.5mg CB	100 tubes of 2mL	dSPE.EN.HPFV.100.2
	900mg MgSO ₄ + 150mg PSA + 45mg CB	50 tubes of 15mL	dSPE.EN.HPFV.50.15
AOAC 2007.01	150mg MgSO ₄ + 50mg PSA + 50mg CB + 50mg C18	100 tubes of 2mL	dSPE.AOAC.HPFV.100.2
	1200mg MgSO ₄ + 400mg PSA + 400mg CB + 400mg C18	50 tubes of 15mL	dSPE.AOAC.HPFV.50.15
For Fatty and waxed Fruits & Vegetables			
EN 15662	150mg MgSO ₄ + 25mg PSA + 25mg C18	100 tubes of 2mL	dSPE.EN.FWFV.100.2
	900mg MgSO ₄ + 150mg PSA + 150mg C18	50 tubes of 15mL	dSPE.EN.FWFV.50.15
AOAC 2007.01	150mg MgSO ₄ + 50mg PSA + 50mg C18	100 tubes of 2mL	dSPE.AOAC.FWFV.100.2
	1200mg MgSO ₄ + 400mg PSA + 400mg C18	50 tubes of 15mL	dSPE.AOAC.FWFV.50.15

Qcleanup™ extraction salts are the three main salts mixtures used in QuEChERS method.



QuEChERS methods	Description	Pouches / box	Product reference
Original method	4g MgSO_4 1g NaCl	50	EXT.ORL.50
EN 15662	1g Trisodium citrate Dihydrate 0.5g Disodium hydrogencitrate sesquihydrate 1g NaCl and 4g MgSO_4	50	EXT.EN.50
AOAC 2007.01	1.5g Sodium Acetate and 6g MgSO_4	50	EXT.AOAC.50

