









QuEChERS Method Development Kit - Part #QMDKIT1

Extraction Salts (50mL Centrifuge Tubes)

-  **Pink:** 10 x ECMSSC50CT - QuEChERS 4g MgSO₄/1g NaCl, 50mL CT
-  **Green:** 10 x ECMSSA50CT - QuEChERS 6g MgSO₄/1.5g NaOAc, 50mL CT
-  **Orange:** 10 x ECQUEU750CT - QuEChERS 4g MgSO₄/1g NaCl/500mg Na₂Cit/1g Na₃Cit, 50mL CT

dSPE (2mL Centrifuge Tubes)

-  **Pink:** 20 x CUMPS2CT - QuEChERS 150mg MgSO₄/50mg PSA, 2mL CT
-  **Green:** 20 x CUMC182CT - QuEChERS 150mg MgSO₄/50mg C18, 2mL CT
-  **Blue:** 20 x CUMPSC18CT - QuEChERS 150mg MgSO₄/50mg PSA/50mg C18, 2mL CT
-  **Brown:** 20 x CUMPSGGC182CT - QuEChERS 150mgMgSO₄/50mgPSA/50mgChloroFiltr/50mg C18, 2mL CT
-  **Yellow:** 20 x CUMPSC1875CB2CT - QuEChERS 150mg MgSO₄/50mg PSA/50mg C18/7.5mg GCB, 2mL CT

Extraction Salts Offered

Original, Non-buffered QuEChERS: 4g MgSO₄/1g NaCl, 50mL CT

AOAC: 6g MgSO₄/1.5g NaOAc, 50mL CT

European: 4g MgSO₄/1g NaCl/500mg Na₂Cit/1g Na₃Cit, 50mL CT

dSPE Sorbent Varieties Offered

MgSO₄ - Present in all blends and aids in removing residual water.

PSA - "Primary/Secondary Amine" scavenges organic acids and sugars, typical matrix component in fruits and vegetables. The amount of this sorbent included in a respective blend is critical as it can contribute to lower recovery for acidic analytes of interest.

C18 - scavenges residual proteins and lipids. The provided amount in kits is a good starting point for proof of concept but may need further adjustment based on matrix type.

GCB - "graphitized carbon black" removes pigments (notably chlorophyll and carotenoids). While targeting pigment removal, GCB also can lower recovery for planar pesticides so caution must be used when optimizing this sorbent type.

ChloroFiltr[®] - A novel polymeric based sorbent designed for the removal of chlorophyll from acetonitrile extracts. Traditional QuEChERS cleanup approaches use graphitized carbon black (GCB) to remove pigments, including chlorophyll, from sample extracts. Although GCB is effective in removing chlorophyll it can also retain planar analytes, resulting in low recovery. UCT has developed a proprietary polymeric sorbent that selectively removes chlorophyll without sacrificing the recovery of planar analytes.

