

Analysis of Organotin Compounds via QuEChERS and LC-MS/MS

Version 2 (last update: 24.04.2013)

Notice :

The previous version of the document was withdrawn and all data has been incorporated in a new document linked below:

(Link: http://www.eurl-pesticides.eu/library/docs/srm/EURL_observations_Organotins.pdf)

The document linked is part of the EURL-SRM "List of Observations"¹.

Remarks on the analysis of organotin compounds:

Using the QuEChERS method (EN 15662) the organotin compounds (Fentin, Cyhexatin/Azocyclotin, Fenbutatin oxide) can be extracted from by many commodities with satisfactory recoveries. However, in the case of dry commodities and commodities with high pH recoveries typically drop below 70% especially for fentin and cyhexatin. By lowering the pH during extraction recoveries become satisfactory also for those commodities. Several possibilities on how to run QuEChERS under acidic conditions are briefly described in the document linked above.

The EURL-SRM intends to introduce an acidified QuEChERS method to cover organotins as well as several other compounds that typically show better recoveries under acidic conditions.

¹ EURL-SRM list of observations: http://www.crl-pesticides.eu/docs/public/tmplt_article.asp?CntID=878&LabID=200&Lang=EN