

Method Number: TM 398

Updated: 16/3/2022

Issue Number: 01

Page 1 of 1

**Method Summary****Determination of Selected Pyrethroids In Water****Scope and Range**

This procedure describes a method to detected trace levels of selected pyrethroids in water matrices. It is appropriate for ground water, effluents and similar water matrices. The detection limit (LOD) is set at 50ng/l for all components. The detection limit for this method is based on 80ml of sample being used for the extraction; however, the detection limit will vary if less sample is available for extraction or any dilutions are required.

References

EPA 3510C - Separatory Funnel Liquid-Liquid Extraction.

EPA 8270D - Semi-Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Principle

A portion of sample is extracted with DCM using a liquid/liquid method, concentrated down and analysed using a GC-MS in selective ion monitoring (SIM) mode.

Interferences

Solvents, reagent glassware and other sample processing hardware may yield artifacts to sample analysis. All these materials must be demonstrated to be free from artifacts under the conditions of the analysis. This is undertaken by analysis of method blanks.

If extraction of a sample is prevented due to emulsion, it may be necessary to dilute and re-extract the sample in order to eliminate the effect.