

Method Number: TM 343

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Method Summary**Determination of Selected Pesticides (Suite I) In Liquids By GC-MS****Scope and Range**

This procedure describes a method to detect trace levels of selected pesticides in water matrices. It is appropriate for ground water, effluents and similar water matrices. The detection limit (LOD) is set at 10ng/l for all components with the exception of alpha and beta endosulphan and endosulphan sulphate, which are set at 20ng/l. The detection limit for this method is based on 120ml of sample being used for the extraction; however, the detection limit will increase if less sample volume is available for extraction or any dilutions are required.

References

Epa 8270D

Principle

A portion of sample is extracted with DCM using a liquid/liquid stirred extraction method, the DCM is concentrated then cleaned up using a specialist activated carbon and analysed using a GC-MS in selective ion monitoring (SIM) mode.

Interferences

Solvents, reagent glassware and other sample processing hardware may contain contamination that effects the sample analysis. All these materials must be demonstrated to be free from contamination 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.