Method Summary

Determination of DEHP in Liquids by GCMS

Scope and Range

This method is used to detect di(2-ethylhexyl) phthalate (DEHP), also commonly known as bis(2-ethylhexyl) phthalate (CAS no. 117-81-7). DEHP is one of a small group of low molecular weight phthalates used primarily as a plasticiser.

This method is suitable for surface water, saline water and ground water; and similar environmental matrices.

This procedure is accredited in accordance with ISO17025 for surface water, ground water and saline water.

The detection limit (LOD) is set at 200ng/L for di(2-ethylhexyl) phthalate, commonly known as DEHP.

The detection limit for this method is based on 25ml 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

EPA8270D – Semi-volatile organic compounds by Gas Chromatography/Mass Spectrometry.

Principle

25ml of sample is extracted with Hexane using a liquid/liquid end over end extraction method and analysed using a GC-MS in selective ion monitoring (SIM) mode.

Interferences

Solvents, reagent glassware and other sample processing hardware may have interference with the compound of interest. All these materials must be demonstrated to be free from interference 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.