

**Method Number: TM 078**

Updated: 21/03/2022

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**Method Summary**

**Determination of Solvent Extractable Matter (SEM)**

**Scope and Range**

This method is only suitable for Water and is currently unaccredited.

The LOD for this method is <1mg/l.

**References**

none

**Principle**

300mls of sample is slowly loaded onto a C18 Solid Phase Extraction (SPE) cartridge under vacuum. Once the sample has finished, the cartridge is then air dried. Once dry, the retained compounds are then eluted off the cartridge using Dichloromethane (DCM) into a pre-weighed vial. The solvent is then blown down to dryness under a constant stream of air. The vial is then re-weighed and the SEM is calculated as follows: -

$$\text{SEM (mg/l)} = \frac{\text{wt of extract (g)}}{\text{Vol of sample taken (mls)}} \times 1000 \times 1000$$

**Interferences**

Interferences may come from dirty glassware, improperly condition cartridges and even grease from fingertips. Other interferences may come from dust particles present in the atmosphere that settle in the vials.