



ALCOHOLS

(Methanol & Ethanol)

By GC-FID Method EPA 8015B

Background: Methanol and Ethanol are of interest to surface groundwater investigations involving sites where paints, solvents, and adhesives were handled or stored. These compounds may also be of interest or where there was a gasoline spill or where there is the a leaking underground storage tank that contained gasoline, as these compounds are occasionally used as fuel oxygenates. Methanol has relatively low toxicity to aquatic organisms; lethal concentrations are greater than 100 mg/L (ppm). Methanol is more toxic to humans than ethanol but both alcohols are rapidly metabolized as a carbon and energy source by bacteria in the soil and in surface and groundwater samples.

Method Summary: Aqueous samples are directly injected onto a gas chromatograph (GC) with a Flame Ionization Detector (FID). Second-column confirmation is required to positively identify target analytes. This procedure is applicable to the determination of methanol, ethanol, 1-propanol, I-propanol, T-butanol, N-butanol, I-butanol, and 1-pentanol.

Matrices: Water samples only.

Reporting Limit: 1 mg/L

Collection Bottle: 2 x 40mL unpreserved VOA vials

Holding Time: 14 days