

Oxygenated Fuel Analysis in Air Samples

Applications:

***Soil Vapor Extraction
Ambient Air Quality***

***Emissions from Gas Stations
Exposure Studies***

Oxygenated compounds such as methyl tertiary-butyl ether (MTBE), ethyl tertiary-butyl ether (ETBE), tertiary butanol, tertiary amyl methyl ether (TAME) and isobutanol were added to fuel as an octane-enhancing replacement for lead, primarily in mid to high grade gasoline at concentrations as high as 8% by volume. Higher percentage of up to 15% were used by the US EPA program to reduce ozone and carbon monoxide levels in most polluted areas in the country such as Los Angeles, Denver and Atlanta.

MTBE is considered as a hazard substance. The environmental impact of MTBE and other oxygenated compounds were not thoroughly investigated. MTBE escapes into the environment through gasoline releases primarily from under ground storage systems. Numerous studies have shown that MTBE travels rapidly through soil, is very soluble in water, and is resistance to biodegradation. Thus, it is more likely to impact on ground water and drinking water wells. Because of its adverse human health effect, monitoring of MTBE in air and drinking water is required in some areas

At Quantum Analytical Services, Inc. we are well equipped and qualified to perform analysis of oxygenated compounds in gaseous samples. For more information about MTBE analysis please contact Dr. Andrew Kitto.

