

Methyl Tertiary Butyl Ether (C₅H₁₂O)

What is Methyl Tertiary Butyl Ether?

Methyl Tertiary Butyl Ether (MTBE) is a flammable liquid made from blending chemicals such as isobutylene and methanol, and has been used since the 1980s as an additive for unleaded gasoline to achieve more efficient burning.

Does Methyl Tertiary Butyl Ether have any additional names?

Methyl tert-Butyl Ether; MTBE

What are the known health effects?

Breathing small amounts of MTBE for short periods may cause nose and throat irritation. Some people exposed to MTBE while pumping gasoline, driving their cars, or working in gas stations have reported having headaches, nausea, dizziness, and mental confusion.

How does exposure occur?

Exposure to MTBE may occur by touching the skin or breathing contaminated air while pumping gasoline, breathing exhaust fumes while driving a car, breathing air near highways or in cities, or drinking, swimming, or showering in water that has been contaminated with MTBE.

Is this contaminant regulated?

Yes, and water supplied to customers of Mount Laurel MUA is in compliance with NJDEP requirements. The maximum concentration of MTBE permitted in drinking water is 70 ppb; water supplied by the MLTMUA system has a detected a maximum of 0.81 ppb.

How can I reduce exposure?

Activated carbon can be used to remove MTBE at home.

Additional information regarding MTBE, including the information referenced, can be found at:

<https://www.atsdr.cdc.gov/toxfaqs/tfacts91.pdf>

https://www.who.int/water_sanitation_health/dwg/chemicals/MTBE200605.pdf