

# WHAT IS METHYL TERTIARY BUTYL ETHER?

**Methyl tertiary butyl ether is commonly called MTBE.**

MTBE is a man made substance and is primarily used as an additive in gasoline to make it burn cleaner.



## History and Uses



- MTBE has been used in gasoline since 1979.
- Gasoline sold in large cities and other areas with “smog” problems may contain higher amounts of MTBE.
- MTBE is also used in the production of other chemicals and medicines to dissolve gall stones.

## Properties of MTBE

- Colorless liquid
- Unpleasant taste and odor
- Burns easily
- Evaporates quickly
- Dissolves quickly in water



# METHYL TERTIARY BUTYL ETHER IN THE ENVIRONMENT

## Releases in the environment

Refueling of cars and trucks



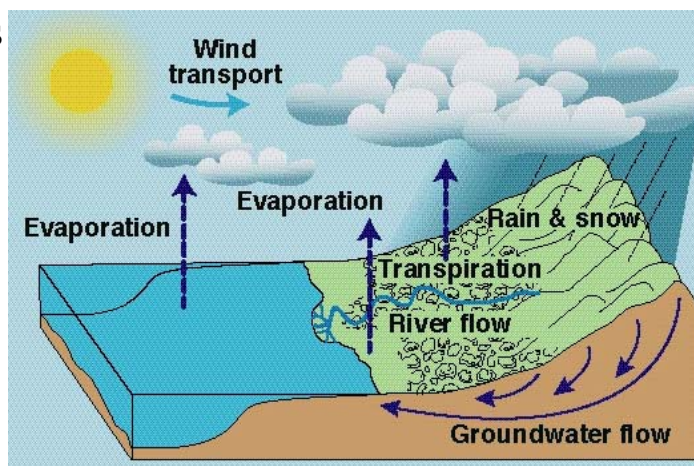
Leaks from underground gasoline tanks



Gasoline spills

## What happens to MTBE in the environment?

MTBE evaporates easily into air.



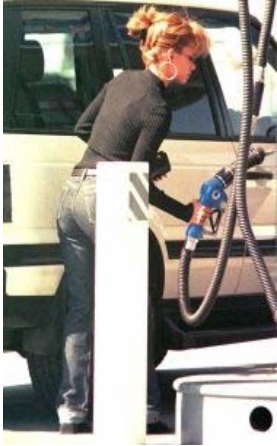
Rain washes small amounts of MTBE out of air and onto soil and water.

MTBE dissolves and spreads readily in water.

MTBE passes quickly through the soil into underground water.

# EXPOSED POPULATIONS

## How are People Exposed to MTBE?

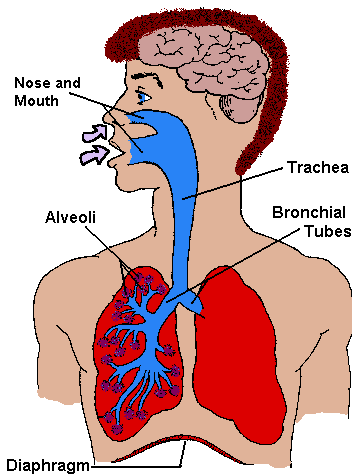


- Most common exposure – breathing gasoline vapors while fueling cars and trucks
- Occupational Exposure- breathing workplace air where MTBE is made or shipped

- Some exposure – isolated areas with drinking water containing MTBE



## How MTBE Enters/Exits the Body



- When you breathe air or drink water containing it
- Through your skin
- May accumulate in body fluids after repeated exposure
- Majority leaves body quickly in air you breathe out or in urine

## Known Health Effects

- Exposure may irritate the eyes, skin, nose, throat and lungs.
- High exposures can affect the central nervous system (brain) ranging from difficulty in concentration and thinking to unconsciousness.
- MTBE has caused cancer in some laboratory animals.