



## Iowa Department of Public Health Bureau of Environmental Health Services

### **Tert-Butyl Alcohol Fact Sheet**

**Overview:** Tert-butyl alcohol is a clear, colorless liquid. Tert-butyl alcohol is found in gasoline (as an octane-booster) and in solvents.

#### **How are people exposed to tert-butyl alcohol?**

The most likely way for someone to be exposed to tert-butyl alcohol is by breathing in vapors from gasoline-type products or from using solvents that contain tert-butyl alcohol.

Sometimes, tert-butyl alcohol can get into water below ground. This can happen if gasoline leaks out from where it's being stored into the ground. Leaking underground and above ground storage tanks can be common sources of groundwater pollution. Some of this groundwater may be used for drinking water.

To know if you've been exposed to a chemical, ask yourself the following questions:

1. Did I breathe it in?
2. Did I touch it?
3. Did I swallow it?

If you answered "no" to all three questions, you were not exposed.

#### **How does exposure to tert-butyl alcohol affect my health?**

The health impact from exposure to tert-butyl alcohol may vary from person to person. In general, chemicals affect the same organs in all people who are exposed.

If you come in contact with a chemical, the amount and length of time can affect your reaction.

Exposure to large amounts of tert-butyl alcohol can cause impaired judgment, confusion, and decrease reaction time (similar to other alcohols). Exposure to significant amounts over time can cause liver, kidney, and heart damage.

#### **How you react to a chemical depends on:**

- your health
- your genetics
- your previous exposure to chemicals (including medicine)
- your personal habits, such as smoking and drinking.

## Does exposure to tert-butyl alcohol cause cancer?

There is not enough information to know if tert-butyl alcohol causes cancer.

## How do I reduce my exposure to tert-butyl alcohol?

Limit your exposure to products containing tert-butyl alcohol.

- Store paint, paint thinners, and gasoline in air tight containers to prevent evaporation into the air.
- Keep windows open and fans running when you use solvents and gasoline-type products.
- If you believe your drinking water well has been polluted with gasoline, stop using the water. Then, get your water tested.

## Are there standards for regulating tert-butyl alcohol?

**Water:** There are no federal or state of Iowa drinking water standards for tert-butyl alcohol.

**Air:** There are no standards or regulations for the amount of tert-butyl alcohol that can be in the air of homes. The Occupational Safety and Health Administration (OSHA) has set a standard of average exposure for an 8-hour work day of 100 parts per million (ppm) in work-place air. People can usually smell tert-

butyl alcohol at lower levels that what is considered harmful to human health.

## References:

[EPA Information on tert-butyl alcohol](#)

This web page summarizes EPA information on fuel oxygenates of which tert-butyl alcohol is included.

## Who should I contact if I want more information?

- Poison Control Center: 800-222-1222
- Your local public health agency
- Iowa Department of Public Health



<http://idph.iowa.gov/>

- Iowa Department of Natural Resources



<http://www.iowadnr.gov/>