

1,2,4-TRICHLOROBENZENE

What is 1,2,4-trichlorobenzene?

1,2,4-trichlorobenzene is a colorless man-made liquid with a pleasant odor. 1,2,4-trichlorobenzene is also known as trichlorobenzene or TCB. It catches fire easily.

Where is 1,2,4-trichlorobenzene found and how is it used?

1,2,4-trichlorobenzene is used to make industrial products. This chemical enters air and water during production, use, or disposal.

This chemical is used as a dye carrier and as a dielectric fluid in transformers. It is also used in herbicides, heat transfer processes, and in synthetic transformer oils. Other uses include a degreaser, a lubricant, and a solvent for making chemicals. At one time, 1,2,4-trichlorobenzene was used to kill termites.

How can people be exposed to 1,2,4-trichlorobenzene?

You could be exposed to 1,2,4-trichlorobenzene through:

- **Breathing** 1,2,4-trichlorobenzene, if you work where it is made or used.
- **Drinking** water contaminated with 1,2,4-trichlorobenzene.
- **Touching** 1,2,4-trichlorobenzene, if you work where it is made or used. You can also touch soil contaminated with this chemical if you live near a waste site.
- **Eye contact** by splashing 1,2,4-trichlorobenzene in the eyes, or by touching the eyes with hands that contacted the chemical.

How does 1,2,4-trichlorobenzene work and how can it affect my health?

Breathing 1,2,4-trichlorobenzene irritates the respiratory system. Exposure to high levels causes a person to feel nervous, restless, or weak. Other effects are tremors, increased heart rate or blood pressure, digestive problems, weight loss, and headache.

Direct contact with the skin causes severe irritation. High levels of exposure affect the liver, kidneys, lungs, and central nervous system.

How is 1,2,4-trichlorobenzene poisoning treated?

There is no treatment just for exposure to 1,2,4-trichlorobenzene. A doctor will treat the symptoms.

Poison Control Center 24/7 Emergency Contact Number: 1-800-222-1222
DPH 24/7 Contact Number: 1-888-295-5156

What should I do if exposed to 1,2,4-trichlorobenzene?

- **If you breathe 1,2,4-trichlorobenzene**, get medical help right away. If needed, perform rescue breathing and mouth-to-mouth resuscitation.
- **If you get 1,2,4-trichlorobenzene in your eyes**, flush your eyes right away with large amounts of water. Flush for at least 15 minutes. Lift the upper and lower lids from time to time. Get medical help right away.
- **If you get 1,2,4-trichlorobenzene on your skin**, remove contaminated clothing. Right away, wash the skin with large amounts of soap and water and get medical help.
- **If you eat or drink 1,2,4-trichlorobenzene**, get medical help right away.

What factors limit use or exposure to 1,2,4-trichlorobenzene?

Waste sites contaminated with 1,2,4-trichlorobenzene, and the soil and water near them, may be dangerous. Avoid these areas to limit contact with the chemical. If you work in an industry which produces or uses 1,2,4-trichlorobenzene, use appropriate work practices and safety measures to limit your exposure.

Is there a medical test to show whether I've been exposed to 1,2,4-trichlorobenzene?

There are no tests just for 1,2,4-trichlorobenzene. A doctor will suggest testing based on possible exposure.

Technical information for 1,2,4-trichlorobenzene

CAS Number: 120-82-1

Chemical Formula: C₆H₃Cl₃

Carcinogenicity (EPA): Group D; not classifiable as to human carcinogenicity.

MCL (Drinking Water): 0.07 mg/L

OSHA Standards: There is no OSHA standard.

NIOSH Standards: The NIOSH ceiling limit (not to be exceeded at any time during the workday) is 5 ppm (37 mg/m³).

Resources

American Conference of Governmental Industrial Hygienists (ACGIH). 2003. *Guide to Occupational Exposure Values*. Cincinnati, OH.

NIOSH Pocket Guide to Chemical Hazards. 2003. Atlanta, GA: U.S. Department of Health and Human Services.

Poison Control Center 24/7 Emergency Contact Number: 1-800-222-1222
DPH 24/7 Contact Number: 1-888-295-5156