

This fact sheet answers the most frequently asked health questions (FAQs) about Stoddard solvent. For more information, call the ATSDR Information Center at 1-888-422-8737. This fact sheet is one in a series of summaries about hazardous substances and their health effects. It's important you understand this information because this substance may harm you. The effects of exposure to any hazardous substance depend on the dose, the duration, how you are exposed, personal traits and habits, and whether other chemicals are present.

SUMMARY: Exposure to Stoddard solvent occurs mainly in the workplace. People who breathe Stoddard solvent can experience headaches; dizziness; and eye, skin, or throat irritation. This substance has been found in at least 7 of the 1,430 National Priorities List Sites identified by the Environmental Protection Agency (EPA).

What is Stoddard solvent?

(Pronounced stōd'ərd sōl'vənt)

Stoddard solvent is a colorless, flammable liquid that smells and tastes like kerosene. It will turn into a vapor at temperatures of 150–200 °C.

Stoddard solvent is a petroleum mixture that is also known as dry cleaning safety solvent, petroleum solvent, and varnoline; its registered trade names are Teksolve S® and Varsol 1®. It is a chemical mixture that is similar to white spirits.

Stoddard solvent is used as a paint thinner; in some types of photocopier toners, printing inks, and adhesives; as a dry cleaning solvent; and as a general cleaner and degreaser.

Use of trade names is for identification only and does not imply endorsement by the Agency for Toxic Substances and Disease Registry (ATSDR) the Public Health Service, or the U.S. Department of Health and Human Services (DHHS).

What happens to Stoddard solvent when it enters the environment?

Because Stoddard solvent is a mixture of many chemi-

cals, these chemicals may react differently in the environment. Some of these chemicals can:

- Be broken down by sunlight or other chemicals in the air;
- Attach to particles in soil or water;
- Sink down to the sediment in water; and
- Be broken down by microorganisms in water, soil, or sediment.

It is not known whether Stoddard solvent will build up in plants or animals living in contaminated soil or water, but some of the chemicals that make up Stoddard solvent might build up in these situations.

How might I be exposed to Stoddard solvent?

- Using products containing Stoddard solvent such as a paint or paint thinner, and breathing the vapors, or getting the vapors in your eyes.
- Breathing contaminated air where Stoddard solvent is manufactured, used, or spilled.
- Breathing contaminated air at or near hazardous waste sites.
- Drinking or bathing in contaminated water.
- Ingesting contaminated soil or water near waste sites containing Stoddard solvent.

ToxFAQs Internet address via WWW is <http://www.atsdr.cdc.gov/toxfaq.html>

- Touching contaminated soil or water.

How can Stoddard solvent affect my health?

Most of the information on the health effects of Stoddard solvent comes from studies in which it is breathed; there are fewer studies of exposure to the eyes or skin.

Exposure to Stoddard solvent in the air can affect your nervous system and cause dizziness, headaches, or a prolonged reaction time. It can also cause eye, skin, or throat irritation.

Rats, cats, and dogs that breathed in large amounts of Stoddard solvent for several hours suffered seizures. Breathing Stoddard solvent has caused bronchitis in guinea pigs, but neither seizures nor bronchitis have been reported when humans breathed it. The effects of swallowing Stoddard solvent are not known.

It is not known whether Stoddard solvent can cause birth defects or affect reproduction.

How likely is Stoddard solvent to cause cancer?

The International Agency for Research on Cancer (IARC) has determined that Stoddard solvent is not classifiable as to its carcinogenicity to humans.

Very few studies have been located that study the carcinogenic effects of Stoddard solvent in humans or animals.

Is there a medical test to show whether I've been exposed to Stoddard solvent?

There is no routinely used test to show whether you have been exposed to Stoddard solvent. Because Stoddard solvent

is a mixture of many chemicals, some of these chemicals can be detected in your breath, blood, urine, and fat. However, the tests cannot tell you if you have been exposed to the specific mixture of chemicals found in Stoddard solvent. They also cannot tell whether you will suffer any health effects.

Has the federal government made recommendations to protect human health?

The Occupational Safety and Health Administration (OSHA) has set a maximum exposure limit of 500 parts of Stoddard solvent per 1 million parts of air (500 ppm) for an 8-hour workday, 40-hour workweek.

The National Institute for Occupational Safety and Health (NIOSH) recommends that the average workplace air levels not be more than 60 ppm in workplace air for a 10-hour workday, 40-hour workweek.

Glossary

Carcinogenicity: Ability to cause cancer.

CAS: Chemical Abstracts Service.

Ingesting: Taking food or drink into your body.

ppm: Parts per million.

Sediment: Mud and debris that have settled at the bottom of a body of water.

References

Agency for Toxic Substances and Disease Registry (ATSDR). 1995. Toxicological profile for Stoddard solvent. Atlanta, GA: U.S. Department of Health and Human Services, Public Health Service.

Where can I get more information? For more information, contact the Agency for Toxic Substances and Disease Registry, Division of Toxicology, 1600 Clifton Road NE, Mailstop F-32, Atlanta, GA 30333. Phone: 1-888-422-8737, FAX: 770-488-4178. ToxFAQs Internet address via WWW is <http://www.atsdr.cdc.gov/toxfaq.html> ATSDR can tell you where to find occupational and environmental health clinics. Their specialists can recognize, evaluate, and treat illnesses resulting from exposure to hazardous substances. You can also contact your community or state health or environmental quality department if you have any more questions or concerns.

