

This fact sheet answers the most frequently asked health questions (FAQs) about *n*-nitrosodi-*n*-propylamine. 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.

**HIGHLIGHTS:** *N*-Nitrosodi-*n*-propylamine is a chemical produced by industry in small amounts for research. Evidence from animal studies indicates that it may cause cancer. This chemical has been found in at least 1 of the 1,177 National Priorities List sites identified by the Environmental Protection Agency (EPA).

### What is *n*-nitrosodi-*n*-propylamine?

(Pronounced n-nī-trō'sō-dī'n-prō'pūl-ə'mēn)

*n*-Nitrosodi-*n*-propylamine is a chemical produced by industry in small amounts for research. It is a yellow liquid at room temperature. Small amounts of *n*-nitrosodi-*n*-propylamine are produced as a side reaction during some manufacturing processes, as a contaminant in some weed killers, and during the manufacture of some rubber products.

### What happens to *n*-nitrosodi-*n*-propylamine when it enters the environment?

- Low levels of *n*-nitrosodi-*n*-propylamine could be released to the environment from contaminated products or from disposal of waste containing this chemical.
- If released to the air, it is broken down by sunlight within a few hours.
- Low levels of *n*-nitrosodi-*n*-propylamine could occur in water from use of weed killers containing it.
- It is broken down in water within a few hours.
- It evaporates from the soil surface or is broken down by bacteria.

### How might I be exposed to *n*-nitrosodi-*n*-propylamine?

- People may be exposed to low levels by eating foods treated with sodium-nitrite preservatives and by drinking certain alcoholic beverages.
- Low levels may occur in cigarette smoke.
- Workers in the rubber industry could be exposed to *n*-nitrosodi-*n*-propylamine.
- People applying contaminated weed killers could be exposed to low levels of the chemical.

### How can *n*-nitrosodi-*n*-propylamine affect my health?

No information is available on the effects of *n*-nitrosodi-*n*-propylamine in people. Studies in animals have shown effects on the liver, lung, stomach, kidneys, and heart at very high doses.

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

### **How likely is *n*-nitrosodi-*n*-propylamine to cause cancer?**

No studies are available on whether or not *n*-nitrosodi-*n*-propylamine causes cancer in people. Animal studies have shown an increase in cancer of the liver, nose, and stomach from *n*-nitrosodi-*n*-propylamine exposure. The Department of Health and Human Services (DHHS) has determined that *n*-nitrosodi-*n*-propylamine may reasonably be anticipated to be a human carcinogen.

### **Is there a medical test to show whether I've been exposed to *n*-nitrosodi-*n*-propylamine?**

Samples of your blood and urine can be tested to determine if you have been recently exposed to *n*-nitrosodi-*n*-propylamine. These tests must be done soon after the exposure occurred. These tests will not tell you whether your health will be affected by *n*-nitrosodi-*n*-propylamine. The tests are not routinely available in hospitals and clinics because they require special equipment.

### **Has the federal government made recommendations to protect human health?**

The EPA recommends that levels in lakes and streams should be limited to 0.005 parts *n*-nitrosodi-*n*-propylamine per

billion parts of water (0.005 ppb) to prevent possible health effects from drinking water or ingesting fish contaminated with *n*-nitrosodi-*n*-propylamine.

The federal recommendations have been updated as of July 1999.

### **Glossary**

Carcinogen: A substance that can cause cancer.

CAS: Chemical Abstracts Service.

Evaporate: To change into a vapor or a gas.

National Priorities List: A list of the nation's worst hazardous waste sites.

ppb: Parts per billion.

### **References**

Agency for Toxic Substances and Disease Registry (ATSDR). 1989. Toxicological profile for *n*-nitrosodi-*n*-propylamine. 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.

