

### **What is sodium hydroxide?**

Sodium hydroxide, also called caustic soda or lye, is a strongly corrosive manufactured chemical substance. Sodium hydroxide is especially useful for its ability to chemically alter fats in a process called saponification. It is used in industry as a chemical reagent, to make soap, and in cooking to cure some foods. Sodium hydroxide is usually sold in pure form as white pellets, or as a water solution.

### **Who is exposed to sodium hydroxide?**

Any person who uses products containing sodium hydroxide can be exposed. Sodium hydroxide may be used in industry and research. Sodium hydroxide is found in some household cleaners, such as drain cleaners, and oven cleaners. It is also used in preparation of homemade soaps, and to clean wood (such as decks) before painting.

### **How can sodium hydroxide affect my health?**

Sodium hydroxide can cause serious burns. If it gets in the eyes it can cause blindness. While sodium hydroxide does not vaporize, if sodium hydroxide dust or powder is inhaled it can cause severe lung damage.

### **How likely is sodium hydroxide to cause cancer?**

The Department of Health and Human Services (DHHS), the International Agency for Research on Cancer (IARC), and the U.S. Environmental Protection Agency (EPA) have not classified sodium hydroxide for carcinogenicity in humans.

### **How can sodium hydroxide affect children?**

There are no studies on the health effects of children exposed to sodium hydroxide. The effects seen in children accidentally exposed to sodium hydroxide are similar to the effects observed in adults.

### **Is there a medical test to show whether I have been exposed to sodium hydroxide?**

There is no medical test for sodium hydroxide exposure.

### **How can I reduce the risk of exposure to sodium hydroxide?**

Store products containing sodium hydroxide out of reach of children. Always follow the product directions when working with solutions of sodium hydroxide. Wear latex or nitrile gloves, and check them for holes. Wear long sleeves and pants to protect your skin, and remove clothes carefully if they get wet to avoid spreading the sodium hydroxide on your skin. If you get sodium hydroxide on your skin or in your eyes, wash well with water and seek medical help if irritation persists. If sodium hydroxide is swallowed, get emergency medical aid and do not induce vomiting.

### **Where can I get more information about sodium hydroxide?**

- If you have concerns about sodium hydroxide, contact your healthcare provider.

## Sodium Hydroxide Fact Sheet

- Call your local health department. A directory of local health departments is located at <https://www.vdh.virginia.gov/local-health-districts/>. Contact the Virginia Department of Health at (804) 864-8127 or at [toxicology@vdh.virginia.gov](mailto:toxicology@vdh.virginia.gov).
- Visit the Agency for Toxic Substances and Disease Registry website at <https://www.atsdr.cdc.gov/substances/toxsubstance.asp?toxid=45>.

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