



# Shape Products

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Date MSDS Revised: 3/9/2008

## MATERIAL SAFETY DATA SHEET

**SODIUM HYDROXIDE SOLUTION, 0.1 N**

**MSDS# 2243**

### SECTION 1. PRODUCT IDENTIFICATION

PRODUCT NAME: SODIUM HYDROXIDE SOLUTION, 0.1 N CHEMICAL FORMULA: NaOH in water  
SYNONYMS: Caustic Soda; Lye; Sodium Hydrate

### SECTION 2. COMPOSITION INFORMATION ON INGREDIENTS

CHEMICAL NAMES	%	OSHA PEL	ACGIH TLV	CAS #
SODIUM HYDROXIDE	0.4 - 2	2 mg/m <sup>3</sup>	2 mg/m <sup>3</sup> Ceiling	1310-73-2
WATER	BALANCE	N/A	N/A	7732-18-5

### SECTION 3. HAZARDS IDENTIFICATION

#### PRECAUTIONARY RATINGS

0 = LEAST

1 = SLIGHT

2 = MODERATE

3 = HIGH

4 = EXTREME

HEALTH: 2

FIRE: 0

REACTIVITY: 0

SPECIFIC HAZARD: N/A

EMERGENCY CONTACT: CHEMTREC (800) 424-9300

#### EMERGENCY OVERVIEW

**WARNING!** May cause irritation to eyes and skin. May cause burns to the mouth and gastrointestinal tract. May cause irritation to respiratory tract.

**CARCINOGENICITY:** None of the ingredients listed by IARC, NTP, OSHA.

### SECTION 4. FIRST AID MEASURES

**Eyes:** Flush opened eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention if irritation persists.

**Skin:** Flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention if irritation persists.

**Ingestion:** If victim is conscious and alert, give large quantities of milk or water. Never give anything by mouth to an unconscious person. Get medical attention if irritation persists.

**Inhalation:** Remove to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid if cough or other symptoms appear.

### SECTION 5. FIRE FIGHTING MEASURES

**Flash Point:** Not Available.

**Method Used:** Not Available.

**LFL:** Not Available.

**UFL:** Not Available.

**Extinguishing Media:** Use water spray, dry chemical, carbon dioxide or chemical foam.

**Fire and Explosion Hazards:** Not considered to be a fire or explosion hazard.

**Fire Fighting Instructions:** Use normal procedures/instructions.

### SECTION 6. ACCIDENTAL RELEASE MEASURES

Evacuate the area of all unnecessary personnel.

Ventilate area of leak or spill. Neutralize with dilute acid solutions. Flush down the drain if federal, state, and local regulations allow. Otherwise, containerize for proper disposal.

### SECTION 7. HANDLING AND STORAGE

**Handling:** wash hands thoroughly after handling. Avoid contact with eyes and skin.

**Storage Requirements:** keep storage containers tightly closed in a cool dry place. Store away from acids.

### SECTION 8. EXPOSURE CONTROLS, PERSONAL PROTECTION

**Engineering Controls:** Use adequate ventilation to keep exposure concentrations low.

**Respiratory Protection:** Normal room ventilation is adequate. Check with supplier or regulatory agency for appropriate NIOSH approved respirators.

**Skin Protection:** Chemical resistant gloves.

**Eye Protection:** Safety glasses or goggles with side shields.

### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

BOILING POINT: CA. 100 C

VAPOR PRESSURE (mmHg): N/A

pH: >12

MELTING POINT: CA. 0 C

VAPOR DENSITY (air=1): N/A

SPECIFIC GRAVITY: CA. 1.0

EVAPORATION RATE: N/A

SOLUBILITY (H<sub>2</sub>O): VERY SOLUBLE

APPEARANCE & ODOR: COLORLESS LIQUID, WITH NO ODOR.

### SECTION 10. STABILITY AND REACTIVITY

**STABILITY:** STABLE UNDER NORMAL CONDITIONS.

**INCOMPATIBILITY:** Acids, oxidizers, metals.

**HAZARDOUS POLYMERIZATION:** WILL NOT OCCUR.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Toxic fumes of sodium oxide and hydrogen gas.  
**CONDITIONS TO AVOID:** INCOMPATIBLES, EXCESSIVE EXPOSURE TO AIR.

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**SECTION 11. TOXICOLOGICAL INFORMATION**

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**RTECS#:** CAS# 7732-18-5: ZC0110000  
**CAS#** 1310-73-2: WB4900000  
**LD50/LC50:**  
**CAS#** 1310-73-2:  
Draize test, rabbit, eye: 400 ug Mild;  
Draize test, rabbit, eye: 1% Severe;  
Draize test, rabbit, eye: 50 ug/24H Severe;  
Draize test, rabbit, eye: 1 mg/24H Severe;  
Draize test, rabbit, skin: 500 mg/24H Severe

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**SECTION 12. ECOLOGICAL INFORMATION**

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**Environmental Fate:** No information found. **Environmental Toxicity:** Toxic to aquatic life.

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**SECTION 13. DISPOSAL CONSIDERATIONS**

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Neutralize with dilute acid solutions. Flush down the drain if federal, state, and local regulations allow. Otherwise, containerize for proper disposal.

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**SECTION 14. TRANSPORT INFORMATION**

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PLEASE CONTACT SHAPE PRODUCTS FOR TRANSPORT INFORMATION.

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**SECTION 15. REGULATORY INFORMATION**

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**TSCA Inventory List:**

All of the ingredients (or their hydrate forms) are listed.

**CERCLA Reportable Quantity (RQ):**

CAS# 1310-73-2: 1000 lb.

**SARA Section 302 Threshold Planning Quality (TPQ):**

None of the ingredients have a TPQ.

**SARA Title Codes:**

CAS # 1310-73-2: acute, reactive.

**OSHA:**

This product is not considered to be highly hazardous by OSHA Hazard Communication Standard.

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**SECTION 16. OTHER INFORMATION**

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ALL INFORMATION RECOMMENDATIONS AND SUGGESTIONS APPEARING HEREIN CONCERNING OUR PRODUCT ARE BASED UPON TESTS AND DATA BELIEVED TO BE RELIABLE, HOWEVER IT IS THE USER'S RESPONSIBILITY TO DETERMINE THE SAFETY, TOXICITY AND SUITABILITY FOR HIS/HER OWN USE OF THE PRODUCT DESCRIBED HEREIN. RECIPIENTS ARE ADVISED TO CONFIRM IN ADVANCE OF NEED, THAT THE INFORMATION IS CURRENT, APPLICABLE & SUITABLE TO THEIR CONDITIONS. SINCE THE ACTUAL USE BY OTHERS IS BEYOND OUR CONTROL, NO GUARANTEE, EXPRESSED OR IMPLIED IS MADE BY SHAPE PRODUCTS AS TO THE EFFECTS OF SUCH USE, SHAPE PRODUCTS DOES NOT ASSUME ANY LIABILITY ARISING OUT OF USE, BY OTHERS OF THE PRODUCTS REFERRED TO HEREIN. NOR IS THE INFORMATION HEREIN TO BE CONSTRUED AS ABSOLUTELY COMPLETE SINCE ADDITIONAL INFORMATION MAY BE NECESSARY OR DESIRABLE WHEN PARTICULAR OR EXCEPTIONAL CONDITIONS OR CIRCUMSTANCES EXIST OF BECAUSE OF APPLICABLE LAWS OR GOVERNMENT REGULATIONS.