



IMPORTANT MATERIAL SAFETY DATA SHEET

READ CAREFULLY BEFORE USING CHEMICAL
OSHA requires that this form be kept on file.

Product No. KM 994-M
Product Name SODIUM HYDROXIDE,
50% SOLUTION

24 HOUR EMERGENCY ASSISTANCE
CHEMTREC 800-424-9300
HAZARD TRAINING

SEVERE
MODERATE
MINIMAL

HEALTH HAZARD
FLAMMABILITY
REACTIVITY

3
0
2

SECTION I NAME	
Chemical Synonyms	Caustic Soda 50%
Formula	NaOH
C.A.S. No.	1310-73-2

SECTION II HAZARDOUS INGREDIENTS OF MIXTURES	
Principal Hazardous Component(s)	PEL (mg/m ³)
*Sodium Hydroxide	2mg/m ³

SECTION III PHYSICAL DATA	
Melting Point (°F)	12°C
Boiling Point (°F)	144°C
Vapor Pressure (mm Hg)	13 @ 60°C
Vapor Density (Air=1)	N/A
Solubility in Water	Completely Soluble
Appearance & Odor	Clear liquid with no distinct color.

SECTION IV FIRE AND EXPLOSION HAZARD DATA		
Flash Point (Method Used)	Flammable Limits in Air % by Volume	Upper/Lower
N/A		N/A

Extinguisher Media: Foam, carbon dioxide or dry chemical.

Special Firefighting Procedures: Wear full protective clothing and self-contained breathing apparatus. Avoid direct contact of this product with water as this can cause violent exothermic reaction.

Unusual Fire and Explosion Hazards: Direct contact with water can cause violent exothermic reaction.

D.O.T.	Sodium hydroxide solution, 8, UN1824, PGI
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SECTION V HEALTH HAZARD DATA	
Threshold Limit Value	Effects of Overexposure
2 mg/m ³	Corrosive to all body tissues by all routes of exposure causing severe burns. Irritation to skin may be delayed. Damage to eyes may include blindness. Inhalation may result in varying degrees of irritation or damage to the respiratory tract tissues and an increased susceptibility to respiratory illness including chemical pneumonia.

Emergency and First Aid Procedures
Get medical attention immediately.
Eyes/Skin: Flush with plenty of water for at least 15 minutes. Inhalation: Remove to fresh air, if not breathing, give artificial respiration. If breathing is difficult, give oxygen.
Ingestion: DO NOT INDUCE VOMITING. Give large quantities of water and several glasses of milk if available.

SECTION VI REACTIVITY DATA	
Stability	Conditions to Avoid
Stable <input checked="" type="checkbox"/> Unstable <input type="checkbox"/>	N/A
Incompatibility (Materials to Avoid)	Water, aluminum, tin, zinc and their alloys, strong acids, leather, wool, organic halogen compounds and organic nitro compounds.
Hazardous Decomposition Products	None known.
Hazardous Polymerization	Conditions to Avoid
May Occur <input type="checkbox"/> Will Not Occur <input checked="" type="checkbox"/>	N/A

SECTION VII SPILL OR LEAK PROCEDURES
Steps to be Taken in Case Material is Released or Spilled:
Absorb material with an inert, noncombustible absorbent. Containize for disposal. Neutralize remaining residue with any dilute inorganic acid. Flush spill area with water followed by liberal covering of sodium bicarbonate.

Waste Disposal Method
Discharge, treatment, or disposal may be subject to Federal, State or Local laws. These disposal guidelines are intended for the disposal of catalog size quantities only. Dispose of in accordance with all applicable federal, state and local health and environmental regulations.

SECTION VIII SPECIAL PROTECTION INFORMATION			
Respiratory Protection (Specify Type)	Local Exhaust	Special	Other
NIOSH approved respirator if mists are generated.		X	
Ventilation		Mechanical (General)	
Protective Gloves	Rubber gloves	Eye Protection	Safety goggles
Other Protective Equipment	Lab coat and apron.	Eye wash and shower.	

SECTION IX SPECIAL PRECAUTIONS
Precautions to be Taken in Handling & Storing:
Keep container tightly closed when not in use.
Do not get into eyes, on skin, on clothing. Avoid breathing vapors. Wash thoroughly after handling.

Other Precautions:
Read label on container before using. Do not wear contact lenses when working with chemicals. Always add this product slowly and with constant stirring to lukewarm water or acids to avoid generating heat or an explosive reaction.

Approved by	Steven C. Quandt	Effective Date	11/16/94
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The information contained herein is unclassified unless otherwise indicated. Employees should use this information only as a supplement to other information gathered by them and must not be used for any other purpose.