SODIUM HYDROXIDE,SOLUTON,8,UN1824,II

VIKING CHEMICAL COMPANY
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MATERIAL SAFETY DATA SHEET

A. IDENTIFICATION AND EMERGENCY INFORMATION

PRODUCT NAME: Caustic Soda 50%, Liquid

EMERGENCY TELEPHONE NUMBER:

CHEMTREC - 800/424-9300
VIKING CHEMICAL CO - 800/441-0150

B. COMPONENTS AND HAZARD INFORMATION

Hazard Components (Common Name (s)	(Specific Chemical Identity) CAS #	OSHA PEL	ACGIH TLV	PERCENT
SODIUM HYDROXIDE	1310-73-2	2mg/m3	2 mg/m3	

Hazardous Materials Identification System (HMIS)
Health = 3 Flammability = 0 Reactivity = 2

C. EMERGENCY AND FIRST AID PROCEDURES

EYE CONTACT:
Flush eyes with large amounts of water for at least 30 minutes, lifting upper and lower lids occasionally. Remove contact lenses if applicable. Contact a physician immediately if an irritation develops.

SKIN CONTACT:
Wash with plenty of soap and water. If irritation occurs, seek medical attention.

INHALATION:
Remove person to fresh air at once. If breathing has stopped, resuscitate and seek medical attention immediately.

INGESTION:
DO NOT INDUCE VOMITING! Vomiting will cause further damage to the throat. Dilute by giving water or milk of magnesia. Keep warm and quiet. NEVER give anything by mouth to an unconscious person. SEEK MEDICAL ATTENTION IMMEDIATELY.

D. FIRE AND EXPLOSION HAZARD INFORMATION

FLASH POINT: N/A METHOD USED: N/A

FLAMMABLE OR EXPLOSIVE LIMITS (APPROXIMATE PERCENT BY VOLUME IN AIR)

Estimated values:	Lower Flammable Limit:	N/A
	Upper Flammable Limit:	N/A

EXTINGUISHING MEDIA AND FIRE FIGHTING PROCEDURES:
This product is not combustible. Water spray, foam, carbon dioxide, or dry chemical may be used in areas where this product is stored.

FIRE & EXPLOSION HAZARDS:
This material is not considered flammable, nor will it support combustion.

FIRE-FIGHTING EQUIPMENT:
Wear protective clothing and positive-pressure, self-contained breathing apparatus.

'EMPTY' CONTAINER WARNING:
'Empty' containers retain residue (liquid and/or vapor) and may be dangerous. Do not attempt to clean since residue is difficult to remove. 'Empty' drums should be completely drained, properly bunged and should be disposed of in an environmentally safe manner and in accordance with local, state and governmental regulations. For further information, please refer to Occupational Safety and health Administration regulations. ANSI Z49.1.

E. HEALTH AND HAZARD INFORMATION

EFFECTS OF OVEREXPOSURE: (signs and symptoms of exposure)

EYE CONTACT:
This product contains sodium hydroxide which is destructive to eye tissues on contact. It could cause severe burns that result in damage to the eyes and even blindness.

SKIN CONTACT:
This product contains sodium hydroxide which is destructive to tissues contacted and may cause severe burns.

SKIN ABSORBTION:
See 'SKIN CONTACT' above.

INHALATION:
Airborne mist or spray may cause damage to the upper respiratory tract.

INGESTION:
May cause severe burns and complete perforations of the mucous membranes of the mouth, throat, esophagus and stomach.

SYSTEMIC & OTHER EFFECTS:

ACUTE EXPOSURE:	Corrosive to mucous membranes of the upper respiratory tract, mouth, throat, esophagus and stomach. Corrosive to the eyes and skin.
CHRONIC EXPOSURE:	Superficial destruction of the skin. Possible permanent corneal damage. Varying degrees of damage to the respiratory and digestive tract.

F. PHYSICAL DATA

The following data is approximate or typical values and should not be used for precise design purposes.

BOILING POINT;	288° F. or 142° C.
SPECIFIC GRAVITY: (@ 60° F)	1.530
VAPOR PRESSURE:	1.0 mmHg
PERCENT VOLATILE:	50%
EVAPORATION RATE:	slower than ether

G. REACTIVITY

***** CAUSTIC MATERIALS MAY REACT VIOLENTLY WITH ACIDS AND WATER*****

STABILITY: Under normal conditions this product is considered stable.

INCOMPATIBILITY: (specific conditions and materials to avoid)
Avoid contact with reactive metals such as aluminum and magnesium, organic materials, water, strong organic acids, copper, strong mineral acids.

HAZARDOUS DECOMPOSITION PRODUCTS: none

HAZARDOUS POLYMERIZATION: will not occur.

H. SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:
Avoid personal contact. Contain spill if possible; if not dilute and flush with water. Following flushing, neutralize with dilute acetic acid. In some locations, a liberal covering of sodium bicarbonate may be used. If spill enters sewer system or stream, notify authorities.

DISPOSAL METHOD:
Package, store, transport and dispose of all cleanup materials pertaining to caustic products in accordance with all local, state and federal regulations.

I. PROTECTION AND PRECAUTIONS

VENTILATION:
Use local exhaust to capture vapor, mists or fumes.

RESPIRATORY PROTECTION:
Use NIOSH or MSHA approved supplied-air respiratory protection in confined spaces, if needed if mist levels become noticeable.

PROTECTIVE GLOVES:
Chemical-resistant gloves are recommended to avoid prolonged or repeated skin contact.

EYE PROTECTION:
Splash goggles or full-face shield are recommended at all times in the area where this product is used or stored.

OTHER PROTECTIVE EQUIPMENT:
Use chemical-resistant apron, or other impervious clothing at all times when using or transporting this product to avoid contact.

WORK PRACTICES / ENGINEERING CONTROLS:
Keep containers and storage containers closed when not in use.

PERSONAL HYGIENE:
Cleanse skin thoroughly after contact, before breaks and meals, and at end of work period. Remove contaminated clothing and shoes and discard. Maintain good personal hygiene.

J. TRANSPORTATION INFORMATION

TRANSPORTATION INCIDENT INFORMATION
For further information relative to spills resulting from transportation incidents, refer to latest Department of Transportation Emergency Response Guidebook for Hazardous Materials Incidents. DOT P 5800.3.

DOT SHIPPING INFORMATION
Sodium Hydroxide,Solution,8,UN1824,II

K. ADDITIONAL INFORMATION

This product may be added slowly to water with constant stirring to avoid a possible violent exothermic reaction. When handling this product, avoid contact with leather, wood, aluminum, tin, zinc, and alloys containing these metals. DO NOT mix with strong acids without dilution and agitation to prevent violent or explosive reaction.

When making solutions follow these steps:

ALWAYS wear all protective items described above.
NEVER add water to product.
ALWAYS add product with **constant stirring** slowly to surface of lukewarm (80-100o F.) water to assure product is being completely dissolved as it is added.

If product is added too rapidly, or without stirring, and becomes concentrated at bottom of mixing vessel, excessive heat may be generated, resulting in DANGEROUS boiling and spattering, and a possible IMMEDIATE AND VIOLENT ERUPTION may occur!

THE INFORMATION HEREIN IS GIVEN IN GOOD FAITH
BUT NO WARRANTY, EXPRESSED OR IMPLIED IS MADE

N.A. (not applicable)
N.D. (not determined)

Date: 12/01/01