

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

MATERIAL	CAS#	EINECS#
Sodium Hydroxide	1310-73-2	215-185-5
2(Diethyl Amino-Ethanol)	100378	-----
Water	7732-18-5	231-791-2

Trace components: Trace ingredients (if any) are present in < 1% concentration, (< 0.1% for potential carcinogens, reproductive toxins, respiratory tract mutagens, and sensitizers). None of the trace ingredients contribute significant Additional hazards at the concentrations that may be present in this product. All pertinent hazard information has been provided in this document, per the requirements of the Federal Occupational Safety and Health Administration Standard (29 CFR 1910.1200), U.S. State equivalents, and Canadian Hazardous Materials Identification System Standard (CPR 4).

SECTION 4. FIRST AID MEASURES

EYE CONTACT:

If this product enters the eyes, open eyes while under gently running water. Use sufficient force to open eyelids. Roll eyes to expose more surface. Minimum flushing is for 15 minutes. Seek immediate medical attention.

SKIN CONTACT:

If the product contaminates the skin, immediately begin decontamination with running water. Minimum flushing is for 15 minutes. Remove contaminated clothing, taking care not to contaminate eyes. If skin becomes irritated and irritation persists, medical attention may be necessary. Wash contaminated clothing before reuse, discard contaminated shoes.

INHALATION:

After high vapor exposure, remove to fresh air. If it is suspected that the fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. Keep person warm and at rest, breathing is difficult, give oxygen. If breathing has stopped, trained personnel should immediately begin artificial respiration. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. If the heart has stopped, trained personnel should immediately begin cardiopulmonary resuscitation (CPR). Seek immediate medical attention. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

SWALLOWING:

If swallowed, CALL PHYSIAN OR POISON CONTROL CENTER FOR MOST CURRENT INFORMATION. If professional advice is not available, give two glasses of water to drink. DO NOT INDUCE VOMITING. Never induce vomiting or give liquids to someone who is unconscious, having convulsions, or unable to swallow. Seek immediate medical attention.

NOTES TO PHYSICIAN:

There is no specific antidote. Treatment of overexposure should be directed at the control of symptoms and the clinical condition of the patient. Any material aspirated during vomiting may cause lung injury. Therefore, emesis Should be induced mechanically or pharmacologically. If it is considered necessary to evacuate the stomach contents, this should be done by means least likely to cause aspiration (such as: Gastric lavage after endotracheal intubation). Victims of chemical exposure must be taken for medical attention. Rescuers should be taken for medical attention, if necessary. Take a copy of the label and SDS to physician or health professional with victim.

SECTION 5. FIRE FIGHTING MEASURES

FIRE & EXPLOSIONS PREVENTIVE MEASURES:

Isolate from extreme heat and open flame.

EXTINGUISHING MEDIA:

In case of fire in surroundings, all extinguishing agents allowed.

SPECIAL FIRE FIGHTING PROCEDURES:

Water spray may be ineffective on fire but can protect fire-fighters & cool closed containers. Use fog nozzles if water is used. Do not enter confined fire-space without full bunker gear.

(Helmet with face shield, bunker coats, gloves & rubber boots). Use NIOSH approved positive-pressure self-contained breathing apparatus.

UNUSUAL EXPLOSION AND FIRE PROCEDURES:

Noncombustible.

Isolate from acids.

Closed containers may explode if exposed to extreme heat.

Applying to hot surfaces requires special precautions.

SECTION 6. ACCIDENTAL RELEASE MEASURES

SPILL AND LEAK RESPONSE AND ENVIRONMENTAL PRECAUTIONS:

Uncontrolled releases should be responded to by trained personnel using pre-planned procedures. Proper protective equipment should be used. In case of a spill, clear the affected area, protect people, and respond with trained personnel.

PERSONAL PROTECTIVE EQUIPMENT:

The proper protective equipment for incidental releases (such as: 1 Litter of the product released in a well-ventilated area), use impermeable gloves (triple-gloves, rubber gloves and nitrile gloves, over latex gloves), goggles, face shield, and appropriate body protection. In the event of a large release, use impermeable gloves, specific for the material handled, chemically resistant suit and boots, and hard hat. Self-Contained Breathing Apparatus or respirator may be required where engineering controls are not adequate or conditions for potential exposure exist. When respirators are required, select NIOSH/MSHA approved based on actual or potential airborne concentrations in accordance with latest OSHA and/or ANSI recommendations.

ENVIRONMENTAL PRECAUTIONS:

Stop spill at source. Construct temporary dikes of dirt, sand, or any appropriate readily available material to prevent spreading of the material. Close or cap valves and/or block or plug hole in leaking container and transfer to another container, keep from entering storm sewers and ditches which lead to waterways, and if necessary, call the local fire or police department for immediate emergency assistance.

CONTAINMENT AND CLEAN-UP MEASURES:

Absorb spilled liquid with poly pads or other suitable absorbent materials. If necessary, neutralize using suitable buffering material, (acid with soda ash or base with phosphoric acid), and test area with litmus paper to confirm neutralization. Clean up with non-combustible absorbent (such as: sand, soil, and so on). Shovel up and place all spill residue in suitable containers. Dispose of at an appropriate waste disposal facility according to current applicable laws and regulations and product characteristics at time of disposal (see Section 13- Disposal Considerations).

SECTION 7. HANDLING AND STORAGE

HANDLING:

Use only with adequate ventilation. Do not get in eyes, on skin or clothing. Wear OSHA Standard full face shield. Consult Safety Equipment Supplier. Wear goggles, face shield, gloves, apron & footwear impervious to material.

STORAGE:

Keep separated from strong oxidants, strong acids, metals, food & feedstuffs. Keep dry. Do not store above 49 C/120 F. Keep container tightly closed & upright when not in use to prevent leakage. Wear full face shield, gloves & full protective clothing when opening or handling. When empty, drain completely, replace bungs securely.

NONBULK: CONTAINERS:

Store containers in a cool, dry location, away from direct sunlight, sources of intense heat, or where freezing is possible. Material should be stored in a secondary containers or in a diked area, as appropriate.

Store containers away from incompatible chemicals (see section 10, Stability and Reactivity). Post warning and "NO SMOKING" signs in storage and use areas, as appropriate. Empty containers should be handled with care. Never store food, feed. Or drinking water in containers which held this product.

BULK CONTAINERS:

All tanks and pipelines which contain this material must be labeled. Perform routine maintenance on tanks or pipelines which contain this product. Report all leaks immediately to the proper personnel.

PROTECTIVE PRACTICES DURING MAINTENANCE OF CONTAMINATED EQUIPMENT:

Follow practices indicated in section 6 (Accidental Release Measures). Make sure certain application equipment is locked and tagged-out safely. Always use this product in areas where adequate ventilation is provided. Collect all rinsates and dispose of according to applicable Federal, State, Provincial, or local procedures.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

MATERIAL	CAS#	EINECS#	TWA (OSHA)	TLV (ACGIH)
Sodium hydroxide	1310-73-2	215-185-5	2 mg/m3	2 mg/m3
Water	7732-18-15	231-791-2	None Known	None Known
2(Diethyl Amino-Ethanol)	100378	-----	15 mg/m3	15 mg/m3

MATERIAL	CAS#	EINECS#	CEILING	STEL (OSHA/ACGIH)	HAP
Sodium Hydroxide	1310-73-2	215-185-5	2 ppm	None Known	No

This product contains no EPA Hazardous Air Pollutants (HAP) in amounts > 0.1%.

RESPIRATORY EXPOSURE CONTROLS:

A respiratory protective program that meets OSHA CFR 1910.134 and ANSI Z86.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant a respirator's use.

VENTILATION:

LOCAL EXHAUST: Recommended MECHANICAL (General): Recommended
SPECIAL: None OTHER: None

Please refer to ACGIH document, "Industrial Ventilation, A Manual of Recommended Practices", most recent edition, for details.

PERSONAL PROTECTION:

Wear OSHA Standard full face shield. Consult Safety Equipment Supplier. Wear goggles, face shield, gloves, apron & footwear impervious to material. Wash clothing before reuse.

WORK & HYGIENIC PRACTICES:

Provide readily accessible eye wash stations & safety showers. Wash at the end of each work shift & before eating, smoking or using the toilet. Promptly remove clothing that becomes contaminated. Destroy contaminated leather articles. Launder or discard contaminated clothing.

SECTION 9. PHYSICAL & CHEMICAL PROPERTIES:

APPEARANCE:	Brown clear liquid
ODOR:	Mild odor
ODOR THRESHOLD:	Not Available
pH (@77°F 1% solution)	13-14
MELTING POINT/FREEZING POINT:	Not Available
BOILING RANGE (IBP, 50%, Dry Point):	212°F
FLASH POINT (TEST METHOD):	Not Applicable
EVAPORATION RATE (n-BUTYL ACETATE=1):	Less than 1
FLAMMABILITY CLASSIFICATION:	Non-Combustible
LOWER FLAMMABLE LIMIT IN AIR (% by vol):	Not Applicable
UPPER FLAMMABLE LIMIT IN AIR (% by vol):	Not Available
VAPOR PRESSURE (mm of Hg)@20 C:	Same as water
VAPOR DENSITY (air = 1):	Same as water
SPECIFIC GRAVITY (Water = 1):	1.14-1.16
POUNDS/GALLON:	9.59
WATER SOLUBILITY:	Complete
PARTITION COEFFICIENT (n-Octane/Water):	Not Available
AUTO IGNITION TEMPERATURE:	Not Applicable
DECOMPOSITION TEMPERAURE:	Not Available

SECTION 10. STABILITY & REACTIVITY**STABILITY:**

Stable under most conditions.

CONDITIONS TO AVOID:

Isolate from extreme heat, and open flame.

MATERIALS TO AVOID:

The substance is a strong base, reacts violently with acids and is corrosive.

HAZARDOUS DECOMPOSITION PRODUCTS:

Carbon, phosphorus, sulfur compounds.

HAZARDOUS POLYMERIZATION:

Will not occur.

SECTION 11. TOXICOLOGICAL INFORMATION

ACUTE HAZARDS

EYE & SKIN CONTACT:

Severe burns to skin, defatting, dermatitis.
Severe burns to eyes, redness, tearing, and blurred vision.
Liquid can cause severe skin & eye burns. Wash thoroughly after handling.

INHALATION:

Severe respiratory tract irritation may occur. Vapor harmful.
The applicable occupational exposure limit value should not be exceeded during any part of working exposure.

SWALLOWING:

Harmful or fatal if swallowed.

SUBCHRONIC HAZARDS/CONDITIONS AGGRAVATED

CONDITIONS AGGRAVATED:

None Known.

MAMMALIAN TOXICITY INFORMATION

TOXICITY DATA: Toxicology information for components > 1% concentration is given below:

SODIUM HYDROXIDE:

Eye irritancy (monkey):	1%, 24 hours (severe)
Eye irritancy (rabbit):	500 ml, 24 hours (severe)
Eye irritancy (rabbit):	1% solution (severe)
Eye irritancy (rabbit):	1 mg, 24 hours (severe)
Cytogenic analysis system	(grasshopper parenteral): 20 mg
LD50 (interperitoneal, mouse):	40 mg/kg
LDLO (oral, rabbit):	500 mg/kg

LD50 – Dose that is lethal to 50% of a given species by a given route of exposure.

LC50 – Air concentration that is lethal to 50% of a given species in a given period of time.

LDLO – Lowest lethal dose in a given species by a given route of exposure.

SECTION 12. ECOLOGICAL INFORMATION

ALL WORK PRACTICES MUST BE AIMED AT ELIMINATING ENVIRONMENTAL CONTAMINATION.

EFFECT OF MATERIAL ON PLANTS AND ANIMALS:

This product may be harmful or fatal to plant and animal life if released into the environment.

Refer to section 11 (Toxicological Information) for further data on the effects of this product's components on test animals.

EFFECT OF MATERIAL ON AQUATIC LIFE:

SODIUM HYDROXIDE:

LC100 (Cyprinus carpio):	180 ppm/24 hours 25 C
TLm (mosquito fish):	125 ppm/96 hour (fresh water)
TLm (bluegill):	99 mg/L/48 hour (tap water)

MOBILITY IN SOIL:

Mobility of this material has not been determined.

DEGRADABILITY:

This product is completely biodegradable.

ACCUMULATION:

Bioaccumulation of this product has not been determined.

SECTION 13. DISPOSAL CONSIDERATIONS

Processing, use or contamination may change the waste management options. Recycle / dispose of observing national, regional, state, provincial and local health, safety & pollution laws. If in doubt, contact appropriate agencies.

SECTION 14. TRANSPORT INFORMATION

IF > 1923 LB / 874 KG OF THIS PRODUCT IS IN 1 CONTAINER, IT EXCEEDS THE RQ OF SODIUM HYDROXIDE. "RQ" MUST BE PUT BEFORE THE DOT SHIPPING NAME.

DOT/TDG SHIP NAME: UN1760, Corrosive Liquid, N.O.S. (Contains Diethylaminoethanol and Sodium Hydroxide), 8, PG-III

DRUM LABEL: (CORROSIVE)

IATA / ICAO: UN1760, Corrosive liquids, N.O.S. (Contains Diethylaminoethanol and Sodium Hydroxide), 8, PG-III

IMO / IMDG: UN1760, Corrosive liquids, N.O.S. (Contains Diethylaminoethanol and Sodium Hydroxide), 8, PG-III

EMERGENCY RESPONSE GUIDEBOOK NUMBER 154



SECTION 15. REGULATORY INFORMATION

EPA REGULATIONS:

SARA SECTION 311/312 HAZARDS: Acute Health

ALL components of this product are on the TSCA list.

SARA Title III Section 313 Supplier Notification

This product contains the indicated < * > toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning & Community Right-To-Know Act of 1986 & of 40 CFR 372.

This information must be included in all MSDSs that are copied and distributed for this material.

SARA TITLE III INGREDIENTS	CAS#	EINECS#	(REG.SECTION)	RQ (LBS)
Sodium Hydroxide	1310-73-2	215-185-5	(311,312)	1000

Any release equal to or exceeding the RQ must be reported to the National Response Center (800-424-8802) and appropriate state and local regulatory agencies as described in 40 CFR 302.6 and 40 CFR 355.40 respectively. Failure to report may result in substantial civil and criminal penalties. State & local regulations may be more restrictive than federal regulations.

California Proposition 65 Information:

WARNING! This product contains a chemical known to the state of California to cause cancer.

Diethanolamine	Cancer Yes	Reproductive No
-----------------------	----------------------	---------------------------

INTERNATIONAL REGULATIONS:

The components of this product are listed on the chemical inventories of the following countries: Australia (AICS), Canada (DSL,NDSL), China (IECSC), Europe (EINECS,ELINCS), Japan (METI/CSCL, MHLW/ISHL), South Korea (KECI), New Zealand (NZIOC), Philippines (PICCS), Switzerland (SWISS), Taiwan (NECSI), USA (TSCA).

CANADA: WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM (WHMIS)

D2B: Irritating to skin / eyes.

E: Corrosive Material.

SECTION 16. OTHER INFORMATION

HAZARD RATINGS:

HEALTH (NFPA): 2, HEALTH (HMIS): 2, FLAMMABILITY: 0, PHYSICAL HAZARD: 0
(Personal Protection Rating to be supplied by user based on use conditions.)

This information is intended solely for the use of individuals trained in the NFPA & HMIS hazard rating system.

EMPLOYEE TRAINING:

See Section 2 for Risk & Safety Statements. Employees should be made aware of all hazards of this material (as stated in this SDS) before handling it.

NOTICE

All information, recommendations, and suggestions appearing herein concerning this product are based upon data obtained from the manufacturer and/or recognized technical sources; however, C.C.I. makes no warranty, representation or guaranty as to the accuracy, sufficiency or completeness of the material set forth herein. It is the user's responsibility to determine the safety, toxicity and suitability of his own use, handling and disposal of the product. Additional product literature may be available upon request. Since actual use by others is beyond our control, no warranty, express or implied is made by C.C.I. as to the effects of such use, the results to be obtained or the safety and toxicity of the product nor does C.C.I. assume any liability arising out of use by others of this product.