



MSDS Number: 01591
Product Name: Solution B

Effective Date: 12/11/2003
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SECTION I - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Solution B
Manufacturer: Great Lakes Chemical Corporation
Address: P.O. Box 2200 City: West Lafayette
State: Indiana Zip: 47996-2200
Emergency Telephone Number: 1-800-949-5167
Information Telephone Number: 1-765-497-6100 Fax: 1-765-497-6123
Chemtrec Phone: 1-800-424-9300; Internationally call 703-527-3887
Effective Date: 12/11/2003 Supersede Date: None
MSDS Prepared By: Regulatory Affairs Department/Great Lakes Chemical Corporation
Synonyms: 0.01N NaOH in Water
Product Use: Test kit reagent
Chemical Name: Mixture
Chemical Family: Alkali

Additional Information

No information available

SECTION II - COMPOSITION/INFORMATION ON INGREDIENTS

Table with 4 columns: INGREDIENT NAME, CAS No., %, and EXPOSURE LIMITS. Rows include Sodium hydroxide and Water with their respective CAS numbers and exposure limits.

*Indented chemicals are components of previous ingredient.

Additional Information

Additional limits for sodium hydroxide:
NIOSH REL = C2 mg/m3

SECTION III - HAZARDS IDENTIFICATION

Emergency Overview: Colorless liquid, No odor, Corrosive to eyes, Corrosive to skin, Contact can result in chemical burns, Causes mucous membrane and upper respiratory tract irritation.
Relevant Routes of Exposure: Ingestion, inhalation and skin absorption
Signs and Symptoms of Overexposure: Contact may result in severe eye and skin irritation or corrosion of tissue. Other signs and symptoms of exposure may include

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SECTION III - HAZARDS IDENTIFICATION

blurred vision, photophobia, nausea, vomiting and diarrhea.

Medical Conditions Generally Aggravated By Exposure: None reported

Potential Health Effects: See Section XI for additional information.

Eyes: Corrosive to the eyes. May cause chemical burns.

Skin: Corrosive to skin. May cause chemical burns.

Ingestion: May cause gastrointestinal tract irritation resulting in abdominal pain, nausea, vomiting and diarrhea. May also cause gastrointestinal tract burns and perforation.

Inhalation: Causes mucous membrane and upper respiratory tract irritation.

Chronic Health Effects: None known

Carcinogenicity:

NTP:	No	ACGIH:	No
IARC:	No	OTHER:	No
OSHA:	No		

Additional Information

No information available

SECTION IV - FIRST AID MEASURES

Eyes: Flush with large volumes of water for at least 15 minutes. Get medical attention.

Skin: Wash with large volumes of soap and water for at least 15 minutes. If irritation develops, get medical attention.

Ingestion: If conscious, give person 1 to 2 glasses of water. Get medical attention immediately.

Inhalation: Remove person to fresh air. Get medical attention.

Antidotes: No information available

Notes to Physicians and/or Protection for First-Aiders: No information available

Additional Information

No information available

SECTION V - FIRE FIGHTING MEASURES

Flammable Limits in Air (% by Volume): Not available

Flash Point: Not available

Autoignition Temperature: Not available

Extinguishing Media: All conventional media are suitable.

Fire Fighting Instructions: Wear a self-contained breathing apparatus and protective clothing to prevent skin and eye contact in fire situations.

Unusual Fire and Explosion Hazards: Under fire conditions, toxic and irritating fumes may be emitted.

Flammability Classification: Non-flammable liquid

Known or Anticipated Hazardous Products of Combustion: Oxides of sodium

Additional Information

No information available

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SECTION VI - ACCIDENTAL RELEASE MEASURES

Accidental Release Measures: Wearing appropriate personal protective equipment, collect spill with the aid of an inert absorbent and place in suitable labeled containers for disposal.

Personal Precautions: See Section VIII.

Environmental Precautions: Avoid releasing to the environment.

Additional Information

No information available

SECTION VII - HANDLING AND STORAGE

Handling: Use appropriate personal protection equipment.
Avoid eye, skin and clothing contact.
Do not breathe mist or vapor.
Do not taste or swallow.
Use only in a well ventilated area.
Avoid repeated and prolonged contact.

Storage: Store in a cool, dry, well-ventilated area away from incompatible materials.
Keep container tightly closed.
Protect containers against damage.

Other Precautions: No information available

Additional Information

No information available

SECTION VIII - EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls: Adequate general ventilation is recommended when handling to control airborne levels.

Ventilation Requirements: Use local exhaust to minimize misting and vapor.
Use mechanical ventilation for general area control.
Refer to OSHA 29 CFR 1910.94 for ventilation guidelines.

Personal Protective Equipment:

Eye/Face Protection: Chemical safety goggles or full face shield

Skin Protection: Rubber gloves
Any type of glove not permeable to water.
Clothing designed to minimize skin contact

Respiratory Protection: Wear a NIOSH/MSHA approved mist respirator if misting occurs.
Consult the OSHA respiratory protection information located at 29CFR 1910.134 and the American National Standard Institute's Practices of Respiratory Protection Z88.2.

Other Protective Clothing or Equipment: No information available

Exposure Guidelines: See Section II.

Work Hygienic Practices: Wash thoroughly after handling.
Wash contaminated clothing before reuse.
Clean personal protective equipment before reuse.

Additional Information

No information available

SECTION IX - PHYSICAL & CHEMICAL PROPERTIES

Appearance:	Colorless liquid	Percent Volatile:	Not available
Boiling Point:	212 degrees F	pH Value:	13
Bulk Density:	Not available	pH Concentration:	Not available

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SECTION IX - PHYSICAL & CHEMICAL PROPERTIES

Color:	Colorless	Physical State:	Liquid
Decomposition Temperature:	Not available	Reactivity in Water:	Not water reactive
Evaporation Rate:	Not available	Saturated Vapor Concentration:	Not available
Freezing Point:	Not available	Softening Point:	Not available
Heat Value:	Not available	Solubility in Water:	Miscible
Melting Point:	32 degrees F	Specific Gravity or Density (Water=1):	1.0
Molecular/Chemical Formula:	Mixture	Vapor Density:	>1
Molecular Weight:	N/A	Vapor Pressure:	14 mmHg
Octanol/Water Partition Coefficient:	Not available	Viscosity:	>1
Odor:	None	Volatile Organic Compounds:	Not available
Odor Threshold:	Not available	Water/Oil Distribution Coefficient:	Not available
Particle Size:	N/A	Weight Per Gallon:	8.34 lb

Additional Information

No information available

SECTION X - STABILITY AND REACTIVITY

Stability:	Stable under normal conditions of handling and use.
Conditions to Avoid:	None
Incompatibility With Other Materials:	Metals, acids, aluminum, tin, zinc
Hazardous Decomposition Products:	Thermal decomposition may produce the following: Oxides of sodium
Hazardous Polymerization:	Will not occur
Conditions to Avoid:	None

Additional Information

No information available

SECTION XI - TOXICOLOGICAL INFORMATION

VALUE (LD50 OR LC50)	ANIMAL	ROUTES	COMPONENTS
Not determined	Not determined	Not determined	Solution B

Toxicological Information:

The toxicological properties of this material have not been fully determined.

Corrosive to eyes and skin.

Causes mucous membrane and upper respiratory tract irritation.

Corrosive to gastrointestinal tract.

Other acute and chronic health hazards, as well as target organs, are unknown.

Additional Information

No information available

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SECTION XII - ECOLOGICAL INFORMATION

Ecological Information: Avoid releasing to the environment.

Additional Information

No information available

SECTION XIII - DISPOSAL CONSIDERATIONS

Disposal Considerations: Dispose of waste at an approved chemical disposal facility in compliance with all current Local, State/Province, Federal/Canadian laws and regulations.

Additional Information

No information available

SECTION XIV - TRANSPORT INFORMATION

U.S. DOT

Proper Shipping Name:	Sodium Hydroxide Solution	ID Number:	UN1824
Hazard Class:	8	Labels:	Corrosive
Packing Group:	II	Packaging Exceptions:	154
Special Provisions:	B2, IB2, N34, T7, TP2	Bulk Packaging:	242
Non-Bulk Packaging:	202	Air Cargo Limit:	30 L
Passenger Air/Rail Limit:	1 L	Other Stowage:	N/A
Vessel Stowage:	A		
Reportable Quantity:	See Below		

AIR - ICAO OR IATA

Proper Shipping Name:	Sodium Hydroxide Solution	ID Number:	UN1824
Hazard Class:	8	Packing Group:	II
Subsidiary Risk:	N/A	Packing Instructions:	809; LQ Y809
Hazard Labels:	Corrosive	Packing Instruction -	
Air Passenger Limit Per Package:	1L; LQ 0.5L	Cargo:	813
Air Cargo Limit Per Package:	30L	Special Provisions	A3
		Code:	

WATER - IMDG

Proper Shipping Name:	Sodium Hydroxide Solution	ID Number:	UN1824
Hazard Class:	8	Subsidiary Risk:	N/A
Packing Group:	II		
Medical First Aid Guide Code:	NA		

Additional Information

Emergency Procedures Code: F-A, S-B

CERCLA RQs:
Sodium hydroxide RQ = 1,000 lb

SECTION XV - REGULATORY INFORMATION

U.S. Federal Regulations:

The components of this product are either on the TSCA Inventory or exempt (i.e. impurities, a polymer complying with the exemption rule at 40 CFR 723.250) from the Inventory.

CERCLA Reportable Quantities:
Sodium hydroxide RQ = 1,000 lb

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SECTION XV - REGULATORY INFORMATION

State Regulations:

Sodium hydroxide:

Massachusetts Substance List

New Jersey Special Health Hazard Substance List (0.1% reporting limit)

Pennsylvania Environmental Hazard List

International Regulations:

This material (or each component) is listed on the following inventories:

Canada - DSL

EU - EINECS

Australia - AICS

Japan - ENCS

Korea - ECL

Philippines - PICCS

China - List I

Canadian Disclosure List (1%) - Sodium hydroxide

Canadian WHMIS Hazard Class and Division = E.

SARA Hazards:

Acute: Yes

Chronic: No

Reactive: No

Fire: No

Pressure: No

Additional Information

The above regulatory information represents only selected regulations and is not meant to be a complete list.

SECTION XVI - OTHER INFORMATION

NFPA Codes:

Health: NR

Flammability: NR

Reactivity: NR

Other: NR

HMIS Codes:

* indicates chronic health hazard.

Health: NR

Flammability: NR

Reactivity: NR

Protection: NR

Label Statements:

Not available

Other Information:

Abbreviations:

(L) = Loose bulk density in g/ml

LOEC = Lowest observed effect concentration

MATC = Maximum acceptable toxicant concentration

NA = Not available

N/A = Not applicable

NL = Not limited

NOAEL = No observable adverse effect level

NOEC = No observed effect concentration

NOEL = No observable effect level

NR = Not rated

(P) = Packed bulk density in g/ml

PNOC = Particulates Not Otherwise Classified

PNOR = Particulates Not Otherwise Regulated

REL = Recommended exposure limit

TS = Trade secret

Additional Information

Information on this form is furnished solely for the purpose of compliance with OSHA's Hazard Communication Standard, 29CFR 1910.1200 and The Canadian Environmental Protection Act, Canada Gazette Part II, Vol. 122, No. 2 and shall not be used for any other purpose.