



WATER SPECIALIST SUPPLY CO.,LTD.

Call : 034-440-851-3, 095-367-5790

Sales : 089-695-8181, 083-705-1000, 089-160-6121

MATERIAL SAFETY DATA SHEET

SODIUM HYDROXIDE SOLUTION

PRODUCT: SODIUM HYDROXIDE SOLUTION

SECTION 01: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

WATER SPECIALIST SUPPLY CO.,LTD.

78/7 Moo4 Khae Rai, Krathum Baen, Samut Sakhon 74110

Call (+66) 34-440-851 to 3 , (+66) 95-367-5790

Fax (+66) 34-440-851 to 3 ext.105

Email : Water_wss@hotmail.com

PREPARED BY..... Water Specialist Supply CO.,LTD
PREPARATION DATE..... 19/August/16
PRODUCT NAME..... SODIUM HYDROXIDE SOLUTION,
. CAUSTIC SODA.
CHEMICAL FORMULA..... NaOH .
MOLECULAR WEIGHT..... 39.9971 g mol⁻¹.
CHEMICAL FAMILY..... INORGANIC SALT SOLUTION .
EMERGENCY PHONE NO..... (+66)34-440-851 to 3 or (+66)95-367-5790

SECTION 02 : COMPOSITION/INFORMATION ON INGREDIENT

Chemical Composition:	Guaranteed	CAS No.	EINECS/ELINCS
Sodium Hydroxide (NaOH)	49-51%	1310-73-2	215-185-5
Sodium Carbonate (Na ₂ CO ₃)	<0.2%	497-19-8	207-838-8
Sodium Chloride (NaCl)	<1.0%	7647-14-5	231-598-3
Water	Balance	7732-18-5	215-185-5

SECTION 03: HAZARDS IDENTIFICATION

NFPA: Health - 3 Flammability - 0 Reactivity - 2

EMERGENCY OVERVIEW

Warning: Solution is highly alkaline

Contact will cause marked eye irritation and possible corneal damage. Skin contact will result in irritation and possible corrosion of the skin. Ingestion will irritate/burn mouth, throat and gastrointestinal tract.

POTENTIAL HEALTH EFFECTS

EYE: Contact with the eyes will cause marked eye irritation and possibly severe corneal damage.

SKIN CONTACT: Contact with the skin will cause skin irritation or burning sensation. Prolonged contact will result in corrosion of the skin.

SKIN ABSORPTION: Absorption is unlikely to occur.

INGESTION: Ingestion will result in severe burning and corrosion of mouth, throat and the gastrointestinal tract.

INHALATION: Breathing product mist or spray may cause damage to the upper respiratory tract and lung tissue which could develop into chemical pneumonia depending upon severity of exposure.

CHRONIC EFFECTS/CARCINOGENICITY: Not listed as a carcinogen by NTP, IARC or OSHA.

SECTION 04 : FIRST AID MEASURES

INSTRUCTIONS:

EYES: Immediately flush with large quantities of water for 15 minutes. Hold eyelids apart during irrigation to insure thorough flushing of the entire area of the eye. Obtain immediate medical attention.

SKIN: Immediately flush with large quantities of water. Remove contaminated clothing under a safety shower. Obtain immediate medical attention

INGESTION: DO NOT INDUCE VOMITING. If victim is conscious, immediately give 2 to 4 glasses of water. If vomiting does occur, repeat fluid administration. Obtain immediate medical attention.

INHALATION: Remove victim from contaminated atmosphere. If breathing is labored, administer oxygen. If breathing has ceased, clear airway and start mouth to mouth resuscitation. If heart has stopped beating, external heart massage should be applied. Obtain immediate medical attention.

SECTION 05 : FIRE FIGHTING MEASURES

Fire:

Solution is non-flammable.

Explosive :

Solution is non-flammable. Keep containers/storage vessels in fire area cooled with water spray.

Fire Extinguishing Media:

Water spray or foam or as appropriate for combustibles involved in fire.

Flash Point: Not flammable.

Fire Fight Equipment:

Wear self-contained breathing apparatus, positive pressure, MSHA/NIOSH (approved or equivalent) and full protective gear.

SECTION 06 : ACCIDENTAL RELEASE MEASURES

Small releases: Confine and absorb small releases on sand earth or other inert absorbent. Neutralize solution with weak (~5%) acetic acid if necessary.

DO NOT NEUTRALIZE WITH STRONG MINERAL ACIDS. THIS WILL EVOLVE LARGE AMOUNTS OF HEAT.

Large releases: Wear proper protective equipment. Confine area to qualified personnel. Shut off release if safe to do so. Dike spill area to prevent runoff into sewers, drains or surface waterways (potential aquatic toxicity). Recover as much of the solution as possible. Treat remaining material as a small release (above).

DO NOT NEUTRALIZE WITH STRONG MINERAL ACIDS. THIS WILL EVOLVE LARGE AMOUNTS OF HEAT.

SECTION 07 : HANDLING AND STORAGE

Handling: Wear proper protective equipment (See Section 8). Avoid breathing product mist or spray. Avoid contact with skin and eyes. Use only in a well ventilated area. Dilute product only in enclosed containers. Wash thoroughly after handling.

Storage: Store in well ventilated areas. Do not store combustibles in the area of storage vessels. Keep away from any sources of heat or flame. Store tote and smaller containers out of direct sunlight at moderate temperatures [$<80^{\circ}\text{F}$ (27°C)]. (See Section 10 for materials of construction)

SECTION 08 : EXPOSE CONTROL/PERSONAL PROTECTION

Respiratory Protection: If working near open container or storage vessel opening or open tank truck dome cover, wear self-contained breathing apparatus, positive pressure, MSHA/NIOSH (approved or equivalent).

Skin Protection: Neoprene rubber gloves, chemical suit and boots should be worn to prevent contact with the liquid. Wash contaminated clothing prior to reuse. Contaminated leather shoes cannot be cleaned and should be discarded.

Eye Protection: Chemical goggles and a full face shield.

Exposure Guideline:

OSHA		ACGIH	
<u>TWA</u>	<u>STEL</u>	<u>TLV</u>	<u>STEL</u>
2 ppm		2 ppm (ceiling)	

Engineering Controls: Use adequate exhaust ventilation to prevent inhalation of product vapors. Where feasible scrub process or storage vessel vapors with caustic solution. Maintain eyewash/safety shower in areas where chemical is handled.

SECTION 09 :PHYSICAL AND CHEMICAL PROPERTIES

Physical state :	Colorless to slightly hazy liquid.
Odour :	No distinct odor.
Solubility :	Complete.
Specific Gravity :	1.52 (12.66 lbs/gal) @ 20°C .
Vapor Pressure (mm Hg) :	1.5 mm Hg, (0.2 Pa) @ 20°C.
Vapor density (AIR=1) :	Not applicable
Evaporation Rate(BuAc=1) :	No information found
Boiling Point :	293°F (145°C).
PH :	14.0
Autoignition Temperature :	Not applicable
% Volatiles by the volume@21C(70F):	Not determined
Flash Point :	Not applicable
Decomposition Temperature :	Not available
Viscosity :	Not available
NFPA Rate :Health :	3 ; Flammability: 0; Reactivity: 1
Molecular Formula :	NaOH
Molecular Weight :	40.00

SECTION 10:STABILITY AND REACTIVITY

Stability: This is a stable material

Hazardous Polymerization: Will not occur.

Hazardous Decomposition Products: None

Incompatibility: Acids will cause the release of heat. Sodium hydroxide solution is not compatible with zinc, aluminum or their alloys (i.e. galvanized metals, etc.). These materials of construction should not be used in handling systems or storage containers for this product. (SEE Section 7, Storage)

SECTION 11 : TOXICOLOGICAL INFORMATION

Oral: Data not available

Dermal: LD₅₀: 1350 mg/kg (rabbit)

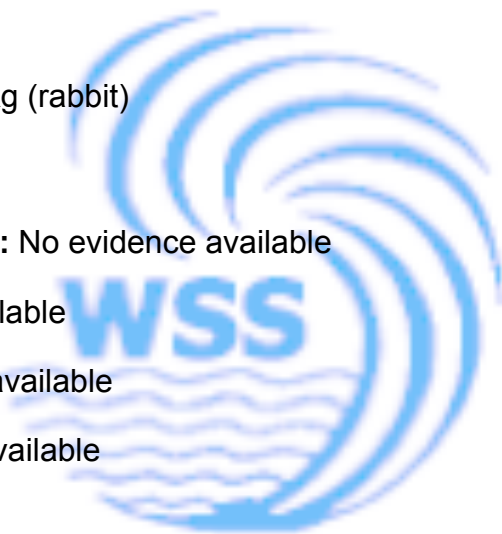
Inhalation: Not available

Chronic/Carcinogenicity: No evidence available

Teratology: Data not available

Reproduction: Data not available

Mutagenicity: Data not available



SECTION 12 : ECOLOGICAL CONSIDERATION

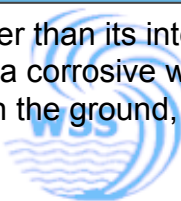
None available



SECTION 13 : DISPOSAL CONSIDERATION

If released to the environment for other than its intended purpose, this product pH will be high enough to meet the definition of a corrosive waste, D002.

DO NOT ALLOW into any sewers, on the ground, or into any body of water.



SECTION 14 : TRANSPORT INFORMATION

DOT Proper Shipping Name: Sodium Hydroxide Solution

DOT Hazard Class: 8

UN/NA Number: UN1824

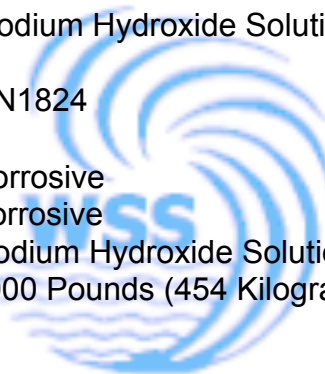
Packing Group: II

DOT Placard: Corrosive

DOT Label(s): Corrosive

IMO Shipping Name: Sodium Hydroxide Solution

Reportable Quantity: 1000 Pounds (454 Kilograms)



SECTION 15 :REGULATORY INFORMATION

OSHA:

This product is listed as a hazardous material under criteria of the Federal OSHA Hazard Communication Standard, 29 CFR 1910.1200.

SARA TITLE III:

EHS (Extremely Hazardous Substance) List: . No

Section 311/312, (Tier I,II) Categories: Immediate (acute) : Yes
Fire : No
Sudden release : No
Reactivity :Yes
Delayed (chronic) : No

Section 313 (Toxic Release Report-Form R): No

TPQ (Threshold Planning Quantity): No

CERCLA/SUPERFUND: RQ(Reportable Quality) :1000lbs(454 kg)

TSCA (Toxic Substance Control Act) Inventory List: Yes

RCRA (Resource Conservation and Recovery Act) Status: Yes(see section13)

WHMIS (Canada) Hazard Classification: **E**

15.7 DOT Hazardous Material: (See Section 14) : Yes

15.8 CAA Hazardous Air Pollutant (HAP) : No

SECTION 16 :OTHER INFORMATION

Synonyms/Common Names: Sodium Hydroxide; Soda Lye; Lye; Caustic Soda
Chemical Family/Type: Alkali

Disclaimer :

Water Specialist Supply(WSS THAILAND) CO.,Ltd provide information contained here in good faith but make no representation as to its comprehensiveness or accuracy.This document is intended only as a guide to the appropriate precautionary handing of the material by a properly trained person using this product.Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose.

