

MATERIAL SAFETY DATA SHEET



Sodium Hydroxide 30% w/v

SECTION 1 . Product and Company Identification

Product Name and Synonym: Sodium Hydroxide 30% w/v

Product Code: BDH3364

Material Uses:

Manufacturer: Aqua Solutions, Inc
6913 Hwy 225
Deer Park, TX 77536
(281) 479-2569

Entry Date : 11/17/2009

Print Date: 7/21/2010

24 Hour Emergency Assistance : Chemtrec 800-424-9300
Canutec 613-996-6666

Health:	3			
Flammability:	0			
Reactivity:	0			
Hazard Rating:				
Least	Slight	Moderate	High	Extreme
0	1	2	3	4
NA = Not Applicable		NE = Not Established		

SECTION 2 HAZARD IDENTIFICATION

Danger! Corrosive! Causes severe irritation and burns. May be harmful if swallowed. Avoid breathing vapor or dust. Use with adequate ventilation. Avoid contact with eyes, skin, and clothes. Wash thoroughly after handling. Keep container closed.

Physical state: Liquid.

Odor: Odorless.

OSHA/HCS status: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Emergency overview: DANGER! CORROSIVE!

CAUSES RESPIRATORY TRACT, EYE AND SKIN BURNS. HARMFUL IF ABSORBED THROUGH SKIN OR IF SWALLOWED.
CONTAINS MATERIAL WHICH CAUSES DAMAGE TO THE FOLLOWING ORGANS:
LUNGS, RESPIRATORY TRACT, SKIN, EYE, LENS OR CORNEA.

Routes of entry: Inhalation. Ingestion.

Potential acute health effects

Eyes: Corrosive to eyes.

Skin: Toxic in contact with skin. Corrosive to the skin.

Inhalation: Corrosive to the respiratory system.

Ingestion: Toxic if swallowed. May cause burns to mouth, throat and stomach.

Carcinogenic effects: No known significant effects or critical hazards.

Mutagenic effects: No known significant effects or critical hazards.

Teratogenicity/Reproductive toxicity: No known significant effects or critical hazards.

Medical conditions: Repeated skin exposure can produce local skin destruction or dermatitis. Repeated or prolonged exposure to the substance can produce lung damage. Repeated or prolonged contact with spray or mist may produce chronic eye irritation and severe skin irritation. Repeated or prolonged exposure to the substance can produce target organs

Sodium Hydroxide 30% w/v

damage.

See toxicological information (section 11)

SECTION 3 MIXTURE COMPONENTS

SARA 313	Component	CAS Number	Percent Comp.	Dimension	Exposure Limits
<input checked="" type="checkbox"/>	Sodium Hydroxide	CAS# 1310-73-2	30%	W/W	OSHA PEL 2 mg/m ³ ACGIH 2mg/m ³
<input type="checkbox"/>	Water, Deionized ASTM Type II	CAS# 7732-18-5	Balance	W/W	None Established

SECTION 4 FIRST AID MEASURES

Danger! Corrosive! Causes severe irritation and burns. May be harmful if swallowed. Avoid breathing vapor or dust. Use with adequate ventilation. Avoid contact with eyes, skin, and clothes. Wash thoroughly after handling. Keep container closed.

FIRST AID: SKIN: Remove contaminated clothing. Wash exposed area with soap and water. if irritation persists, seek medical attention.

EYES: Wash eyes with plenty of water for at least 15 minutes, lifting lids occasionally. Seek Medical Aid. INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen

INGESTION: Give several glasses of milk or water. Vomiting may occur spontaneously, but DO NOT INDUCE! Never give anything by mouth to an unconscious person.

Protection of first-aiders: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing or wear gloves.

SECTION 5 FIRE FIGHTING MEASURES

Fire Extinguisher Type:	Any means suitable for extinguishing surrounding fire
Fire / Explosion Hazards:	Can react with certain metals to release explosive hydrogen gas.
Fire Fighting Procedure:	Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and clothing.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Absorb spill with inert material, then place in a chemical waste container. Neutralize with a weak acid.

Personal precautions: Immediately contact emergency personnel. Keep unnecessary personnel away. Use suitable protective equipment.

Environmental precautions: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Methods for cleaning up: If emergency personnel are unavailable, contain spilled mater. For small spills, add absorbent (soil may be used in the absence of other suitable materials), scoop up material and place in a sealable, liquid-proof container for disposal. For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway. Place spilled material in an appropriate container for disposal.

Sodium Hydroxide 30% w/v

SECTION 7 HANDLING AND STORAGE

Store in a cool dry well ventilated place. Do not get in eyes, on skin, on clothing. Wash thoroughly after handling. Keep container tightly closed.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Respiratory Protection: None required

Ventilation

Local Exhaust

Mechanical

Protective Gloves: Wear rubber or nitrile gloves to prevent exposure.

Eye Protection: Splash Goggles

Other Protective Equipment: Wear appropriate clothing to prevent skin exposure

Product name - United States - Sodium Hydroxide

Exposure limits

ACGIH (United States)
CEIL: 2 mg/m3

OSHA (United States)
CEIL: 2 mg/m3

NIOSH REL (United States, 1994).
CEIL: 2 mg/m3

OSHA Final Rule (United States, 1989).
CEIL: 2 mg/m3

Consult local authorities for acceptable exposure limits.

Engineering measures: Use only with adequate ventilation. If user operations generate dust, fumes, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Hygiene measures: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Melting Point:	Information not available	Percent Volatile by Volume:	70%
Boiling Point:	Information not available	Evaporation Rate	Information not available
Vapor Pressure:	Information not available	Evaporation Standard	
Vapor Density:	Information	Auto Ignition Temp	Not applicable

Sodium Hydroxide 30% w/v

	not available		
Solubility in Water:	Soluble	Lower Flamm. Limit in Air	Not applicable
Appearance /Odors:	Clear colorless solution/no odor	Upper Flamm. Limit in Air	Not applicable
Flash Point:	Not flammable		
Specific Gravity:	Information not available		

SECTION 10 STABILITY AND REACTIVITY INFORMATION

Stability:	Stable
Conditions to Avoid:	Acids
Materials to Avoid:	Acids, flammable liquids, organic halogens, metals, nitrocompounds
Hazardous Decomposition Products:	Sodium Oxides
Hazardous polymerization:	Will Not Occur
Conditions to Avoid:	None known
	Conditions of Reactivity: Can react with certain metals to release explosive hydrogen gas. Can react with Explosively with Nitro and chloro organic compounds.

SECTION 11 Toxicological Information

Toxicity data - United States

Product/Ingredient name: Sodium Hydroxide

Test	Result	Route	Species
LDLo	500 mg/kg	Oral	Rabbit
LDLo	500 mg/kg	Oral	Rabbit

Chronic effects on humans: Contains material which causes damage to the following organs:
lungs, upper respiratory tract, skin, eye, lens or cornea.

Other toxic effects on humans: Very hazardous in case of skin contact (corrosive), of eye
contact (corrosive), of ingestion.
Slightly hazardous in case of inhalation (lung sensitizer, lung corrosive).

Specific effects

Carcinogenic effects: No known significant effects or critical hazards.

Mutagenic effects: No known significant effects or critical hazards.

Teratogenicity/Reproductive toxicity: No known significant effects or critical hazards.

Sensitization

Ingestion: May cause burns to mouth, throat and stomach.

Inhalation: Corrosive to the respiratory system.

Eyes: Corrosive to eyes.

Skin: Corrosive to the skin.

Sodium Hydroxide 30% w/v

SECTION 12 Ecological Information

Environmental precautions: No known significant effects or critical hazards.

Products of degradation: Some metallic oxides.

Toxicity of the products of biodegradation: The products of degradation are less toxic than the product itself.

SECTION 13 Disposal Considerations

Waste disposal: The generation of waste should be avoided or minimized whenever possible. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

RCRA classification: Code: C

Disposal should be in accordance with applicable regional, national and local laws and regulations. Local regulations may be more stringent than regional or national requirements.

The information presented below only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

SECTION 14 Transport Information

DOT Classification: Sodium Hydroxide Solution, 8, UN1824, PG II

DOT Regulations may change from time to time. Please consult the most recent D.O.T. regulations.

SECTION 15 Regulatory Information

United States

HCS Classification: Toxic material
Corrosive material
Target organ effects

U.S. Federal regulations: TSCA 8(b) inventory: Listed

SARA 302/304/311/312 extremely hazardous substances: No products were found.

SARA 302/304 emergency planning and notification: No products were found.

SARA 302/304/311/312 hazardous chemicals: Sodium Hydroxide

SARA 311/312 MSDS distribution - chemical inventory - hazard identification: Sodium Hydroxide: Immediate (acute) health hazard, Delayed (chronic) health hazard

Clean Water Act (CWA) 307: No products were found.

Clean Water Act (CWA) 311: Sodium Hydroxide

Clean Air Act (CAA) 112 accidental release prevention: No products were found.

Clean Air Act (CAA) 112 regulated flammable substances: No products were found.

Clean Air Act (CAA) 112 regulated toxic substances: No products were found.

State regulations: Pennsylvania RTK: Sodium Hydroxide: (environmental hazard, generic environmental hazard)

Massachusetts RTK: Sodium Hydroxide

New Jersey: Sodium Hydroxide 1.000N

Sodium Hydroxide 30% w/v

Canada

WHMIS (Canada): Class D-1B: Material causing immediate and serious toxic effects (Toxic).
Class E: Corrosive material

CEPA DSL/CEPA NDSL: CEPA DSL: Sodium Hydroxide; Water

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

EU regulations

Risk phrases: This product is not classified according to EU legislation.

United States

HCS Classification: Irritating material

U.S. Federal regulations: TSCA 8(b) inventory: Listed

SARA 302/304/311/312 extremely hazardous substances: No products were found.

SARA 302/304 emergency planning and notification: No products were found.

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Clean Air Act (CAA) 112 regulated toxic substances: No products were found.

State regulations: Pennsylvania RTK: Sodium Hydroxide: (environmental hazard, generic environmental hazard)

Massachusetts RTK: Sodium Hydroxide

New Jersey: Sodium Hydroxide 0.1000N

Canada

WHMIS (Canada): Class D-1B: Material causing immediate and serious toxic effects (Toxic).

CEPA DSL/CEPA NDSL: CEPA DSL: Water

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

EU regulations

Risk phrases: This product is not classified according to EU legislation.

International regulations

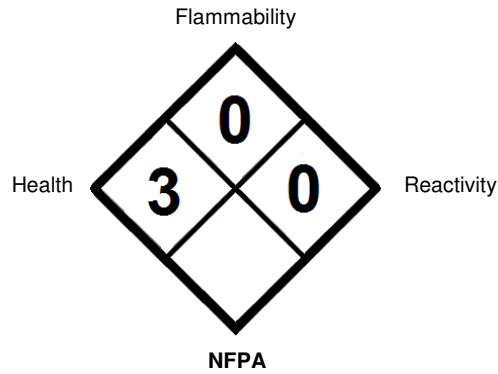
International lists: Australia (NICNAS): Sodium Hydroxide; Water

Japan (METI): Sodium Hydroxide; Water

Korea (TCCL): Sodium Hydroxide; Water

Philippines (RA69): Sodium Hydroxide; Water

Sodium Hydroxide 30% w/v



Revisions

7/20/2010

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Review date for MSDS. STN

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