

The following list contains the Material Safety Data Sheets you requested. Please scroll down to view the requested MSDS(s).

<u>Product</u>	<u>MSDS</u>	<u>Distributor</u>	<u>Format</u>	<u>Language</u>	<u>Quantity</u>
1437701	N/A	Hach Company	ROWGHS	English	1

Total Enclosures: 1

World Headquarters
Hach Company
P.O.Box 389
Loveland, CO USA 80539
(970) 669-3050

MSDS No: M00864

SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Sodium Hydroxide 0.1600 ± 0.0007 N

Catalog Number: 1437701

Hach Company
P.O.Box 389
Loveland, CO USA 80539
(970) 669-3050

Emergency Telephone Numbers:
(Medical and Transportation)
(303) 623-5716 24 Hour Service
(515)232-2533 8am - 4pm CST

MSDS Number: M00864

Chemical Name: Not applicable

CAS Number: Not applicable

Additional CAS No. (for hydrated forms): Not applicable

Chemical Formula: Not applicable

Chemical Family: Not applicable

Intended Use: Standard solution

2. HAZARDS IDENTIFICATION

GHS Classification:

Hazard categories: Serious Eye Damage/Eye Irritation: Eye Dam. 1

GHS Label Elements:

DANGER



Hazard statements: Causes serious eye damage.

Precautionary statements: Wear protective gloves / protective clothing / eye protection / face protection. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.

HMIS:

Health: 3

Flammability: 0

Reactivity: 0

Protective Equipment: X - See protective equipment, Section 8.

NFPA:

Health: 3

Flammability: 0

Reactivity: 0

Symbol: Not applicable

WHMIS Hazard Classification: Class E - Corrosive material

WHMIS Symbols: Corrosive

3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Components according to GHS:

Sodium Hydroxide

CAS Number: 1310-73-2
Chemical Formula: NaOH
GHS Classification: Met. Corr.1, H290; Skin Corr. 1A, H314; Aquatic Acute 3, H402
Percent Range (Trade Secret): 0.5 - 3.0
Percent Range Units: weight / volume
PEL: 2 mg/m³
TLV: Not established

WHMIS Symbols: Acute Poison Corrosive
Hazardous Components according to GHS: No
Demineralized Water

CAS Number: 7732-18-5
Chemical Formula: H₂O
GHS Classification: Not a dangerous substance according to GHS.
Percent Range (Trade Secret): > 99.0
Percent Range Units: volume / volume
PEL: Not established
TLV: Not established

WHMIS Symbols: Not applicable

4. FIRST AID MEASURES

General Information: In the event of exposure, show this Material Safety Data Sheet and label (where possible) to a doctor.

Advice to doctor: Treat symptomatically.

Eye Contact: Immediately flush eyes with water for 15 minutes. Call physician.

Skin Contact (First Aid): Remove contaminated clothing. Wash skin with soap and plenty of water. Call physician immediately.

Inhalation: Remove to fresh air.

Ingestion (First Aid): Do not induce vomiting. Give 1-2 glasses of water. Call physician immediately. Never give anything by mouth to an unconscious person.

5. FIRE FIGHTING MEASURES

Flammable Properties: Material will not burn.

Fire Fighting Instruction: As in any fire, wear self-contained breathing apparatus pressure-demand and full protective gear.

Extinguishing Media: Use media appropriate to surrounding fire conditions

Extinguishing Media NOT To Be Used: Not applicable

Fire / Explosion Hazards: This product will not burn or explode.

Hazardous Combustion Products: This material will not burn.

6. ACCIDENTAL RELEASE MEASURES

Spill Response Notice:

Only persons properly qualified to respond to an emergency involving hazardous substances may respond to a spill according to federal regulations (OSHA 29 CFR 1910.120(a)(v)) and per your company's emergency response plan and guidelines/procedures. See Section 13, Special Instructions for disposal assistance.

Containment Technique: Absorb spilled liquid with non-reactive sorbent material. Stop spilled material from being released to the environment.

Clean-up Technique: If permitted by regulation, Cover spilled material with a dry acid, such as citric or boric. Scoop up slurry into a large beaker. Dilute with a large excess of water. Adjust to a pH between 6 and 9 with an acid, such as sulfuric or citric. Flush reacted material to the drain with a large excess of water. Decontaminate the area of the spill with a soap solution. Otherwise, Pick up spill for disposal and place in a closed container. Dispose of in accordance with local, state and federal regulations or laws.

Evacuation Procedure: Evacuate local area (15 foot radius or as directed by your facility's emergency response plan) when: any quantity is spilled. If conditions warrant, increase the size of the evacuation.

DOT Emergency Response Guide Number: Not applicable

7. HANDLING AND STORAGE

Handling: Avoid contact with eyes skin clothing Do not breathe mist or vapors. Wash thoroughly after handling. Maintain general industrial hygiene practices when using this product.

Storage: Protect from: heat Keep away from: acids

Flammability Class: Not applicable

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls: Have an eyewash station nearby. Maintain general industrial hygiene practices when using this product.

Personal Protective Equipment:

Eye Protection: chemical splash goggles

Skin Protection: disposable latex gloves lab coat

Inhalation Protection: adequate ventilation

Precautionary Measures: Avoid contact with: eyes skin clothing Do not breathe: mist/vapor Wash thoroughly after handling. Protect from: heat Keep away from: acids/acid fumes

TLV: Not established

PEL: Not established

For Occupational Exposure Limits (OEL) for ingredients, see section 3 - Composition/Information on Ingredients.:

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Clear, colorless liquid

Physical State: Liquid

Molecular Weight: Not applicable

Odor: Odorless

Odor Threshold: Odorless

pH: >13

Metal Corrosivity:

Corrosivity Classification: Not classified as corrosive to metals according to GHS criteria.

Steel: 0.000 in/yr

Aluminum: 0.16 in/yr

Specific Gravity/ Relative Density (water = 1; air = 1): 0.988

Viscosity: Not determined

Solubility:

Water: Miscible

Acid: Miscible

Other: Not determined

Partition Coefficient (n-octanol / water): Not applicable

Coefficient of Water / Oil: Not applicable

Melting Point: Not applicable

Decomposition Temperature: Not determined

Boiling Point: ~100°C

Vapor Pressure: Not determined

Vapor Density (air = 1): Not determined

Evaporation Rate (water = 1): 0.72

Volatile Organic Compounds Content: Not applicable

Flammable Properties: Material will not burn.

Flash Point: Not applicable

Method: Not applicable

Flammability Limits:

Lower Explosion Limits: Not applicable

Upper Explosion Limits: Not applicable

Autoignition Temperature: Not determined

Explosive Properties:

Not classified according to GHS criteria.

Oxidizing Properties:

Not classified according to GHS criteria.

Reactivity Properties:

Not classified as self-reactive, pyrophoric, self-heating or emitting flammable gases in contact with water according to GHS criteria.

Gas under Pressure:

Not classified according to GHS criteria.

Not applicable

10. STABILITY AND REACTIVITY

Chemical Stability: Stable when stored under proper conditions.

Mechanical Impact: None reported

Static Discharge: None reported.

Reactivity / Incompatibility: May react violently in contact with: strong acids

Hazardous Decomposition: No hazardous decomposition products known.

Conditions to Avoid: Heat Evaporation

11. TOXICOLOGICAL INFORMATION

Toxicokinetics, Metabolism and Distribution: No information available for mixture.

Toxicologically Synergistic Products: None reported

Acute Toxicity: Based on classification principles, the classification criteria are not met.

ATE (mix) Oral LD50 = 80718 mg/Kg

Specific Target Organ Toxicity - Single Exposure (STOT-SE): Based on classification principles, the classification criteria are not met.

Specific Target Organ Toxicity - Repeat Exposure (STOT-RE): Based on classification principles, the classification criteria are not met.

Skin Corrosion/Irritation: Based on classification principles, the classification criteria are not met.

Sodium hydroxide 1% by weight: At 4 hrs: erythema avg.: 1.6; edema avg.: 0.33; At 1, 2 and 3 days: erythema avg: 1; edema avg.: 0.66. Not corrosive. Not an OSHA irritant.

Eye Damage: Irritating to eyes.

Based on pH of solution (pH >13)

Sensitization: Based on classification principles, the classification criteria are not met.

CMR Effects/Properties (carcinogenic, mutagenic or toxic to reproduction): No germ cell mutagenicity, carcinogenicity or reproductive toxicity data found.

This product does NOT contain any NTP listed chemicals.

This product does NOT contain any OSHA listed carcinogens.

Symptoms/Effects:

Ingestion: May cause: burns of the mouth and esophagus vomiting rapid pulse and respirations shock collapse

Inhalation: No effects anticipated

Skin Absorption: None Reported

Chronic Effects: None reported

Medical Conditions Aggravated: Pre-existing: Eye conditions

12. ECOLOGICAL INFORMATION

Product Ecological Information: --

No ecological data available for this product.

Ingredient Ecological Information: Sodium Hydroxide: Oncorhynchus mykiss 96 h LC50 = 45.4 mg/L; Daphnia sp. 48 h EC50 = 100 mg/L.

No ecological data available for the ingredients of this product.

CEPA Statement: Sodium Hydroxide: Persistent, not bioaccumulative or inherently toxic to aquatic organisms.

CEPA Statement: Water: Persistent, not bioaccumulative or inherently toxic to aquatic organisms.

13. DISPOSAL CONSIDERATIONS

EPA Waste ID Number: D002

Special Instructions (Disposal): Dilute to 3 to 5 times the volume with cold water. Adjust to a pH between 6 and 9 with an acid, such as sulfuric or citric. Open cold water tap completely, slowly pour the reacted material to the drain. Allow cold water to run for 5 minutes to completely flush the system.

Empty Containers: Rinse three times with an appropriate solvent. Dispose of empty container as normal trash.

NOTICE (Disposal): These disposal guidelines are based on federal regulations and may be superseded by more stringent state or local requirements. Please consult your local environmental regulators for more information. In Europe: Chemical and analysis solutions must be disposed of in compliance with the respective national regulations. Product packaging must be disposed of in compliance with the country-specific regulations or must be passed to a packaging return system.

14. TRANSPORT INFORMATION

D.O.T.:

D.O.T. Proper Shipping Name: Not Currently Regulated

--

Hazard Class: NA

Subsidiary Risk: NA

ID Number: NA

Packing Group: NA

T.D.G.:

Proper Shipping Name: Not Currently Regulated

--

Hazard Class: NA

Subsidiary Risk: NA

UN Number/PIN: NA

Packing Group: NA

I.C.A.O.:

I.C.A.O. Proper Shipping Name: Not Currently Regulated

--

Hazard Class: NA

Subsidiary Risk: NA

ID Number: NA

Packing Group: NA

I.M.O.:

Proper Shipping Name: Not Currently Regulated

--

Hazard Class: NA

Subsidiary Risk: NA

ID Number: NA

Packing Group: NA

Additional Information: There is a possibility that this product could be contained in a reagent set or kit composed of various compatible dangerous goods. If the item is NOT in a set or kit, the classification given above applies. If the item IS part of a set or kit, the classification would change to the following: UN3316 Chemical Kit, Class 9, PG II or III. If the item is not regulated, the Chemical Kit classification does not apply.

15. REGULATORY INFORMATION

U.S. Federal Regulations:

O.S.H.A.: This product meets the criteria for a hazardous substance as defined in the Hazard Communication Standard. (29 CFR 1910.1200)

E.P.A.:

S.A.R.A. Title III Section 311/312 Categorization (40 CFR 370): Immediate (Acute) Health Hazard

S.A.R.A. Title III Section 313 (40 CFR 372): This product does NOT contain any chemical subject to the reporting requirements of Section 313 of Title III of SARA.

--

302 (EHS) TPQ (40 CFR 355): Not applicable

304 CERCLA RQ (40 CFR 302.4): Sodium Hydroxide 1000 lbs.

304 EHS RQ (40 CFR 355): Not applicable

Clean Water Act (40 CFR 116.4): Sodium Hydroxide - RQ = 1000 lbs. (454 kgs.)

RCRA: Contains RCRA regulated substances. See Section 13, EPA Waste ID Number.

State Regulations:

California Prop. 65: No Prop. 65 listed chemicals are present in this product.

Identification of Prop. 65 Ingredient(s): Not applicable

California Perchlorate Rule CCR Title 22 Chap 33: Not applicable

Trade Secret Registry: Not applicable

National Inventories:

U.S. Inventory Status: All ingredients in this product are listed on the TSCA 8(b) Inventory (40 CFR 710).

CAS Number: Not applicable

Canadian Inventory Status: All ingredients of this product are DSL Listed.

EEC Inventory Status: All ingredients used to make this product are listed on EINECS / ELINCS.

Australian Inventory (AICS) Status: All ingredients are listed.

New Zealand Inventory (NZIoC) Status: All components either listed or exempt.

Korean Inventory (KECI) Status: All components of this product are either listed, listed as the anhydrous compound or exempt.

Japan (ENCS) Inventory Status: All components either listed or exempt.

China (PRC) Inventory (MEP) Status: All components either listed or exempt.

16. OTHER INFORMATION

References: 29 CFR 1900 - 1910 (Code of Federal Regulations - Labor). Air Contaminants, Federal Register, Vol. 54, No. 12. Thursday, January 19, 1989. pp. 2332-2983. TLV's Threshold Limit Values and Biological Exposure Indices for 1992-1993. American Conference of Governmental Industrial Hygienists, 1992. In-house information. Technical Judgment. Sax, N. Irving. Dangerous Properties of Industrial Materials, 7th Ed. New York: Van Nostrand Reinhold Co., 1989.

Complete Text of H phrases referred to in Section 3: H290 May be corrosive to metals. H314 Causes severe skin burns and eye damage.

Revision Summary: Substantial revision to comply with EU Reg 1272/2008, Reg 1907/2006 and UN GHS (ST/SG/AC.10/36/Add.3).

Date of MSDS Preparation:

Day: 13

Month: October

Year: 2014

MSDS Prepared: MSDS prepared by Product Compliance Department extension 3350

CCOHS Evaluation Note: It is offered under exemption from WHMIS labeling as specified in the Controlled Products Regulation (CPR) Section 17. It is offered under the interim policy that was established by Health Canada permitting use of GHS-formatted safety data sheets in Canada prior to revision of CPR to GHS. This product has been classified and labeled in accordance with the requirements of GHS (ST/SG/AC.10/36/Add.3). This SDS has been prepared in accordance with the requirements of GHS (ST/SG/AC.10/36/Add.3).

Legend:

NA - Not Applicable	w/w - weight/weight
ND - Not Determined	w/v - weight/volume
NV - Not Available	v/v - volume/volume

USER RESPONSIBILITY: Each user should read and understand this information and incorporate it in individual site safety programs in accordance with applicable hazard communication standards and regulations.

THE INFORMATION CONTAINED HEREIN IS BASED ON DATA CONSIDERED TO BE ACCURATE. HOWEVER, NO WARRANTY IS EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THESE DATA OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF.

HACH COMPANY ©2015