



OCI Company Ltd.

Material Safety Data Sheet

MSDS

0.5N - Sodium Hydroxide

Section 1 - Chemical Product and Company Identification

TRADE NAMES : 0.5N - Sodium Hydroxide

Recommended use : Not available

Restriction of use : Not available

Company Identification

Company : OCI Company Ltd.

Address : 230, Dokbae-ro, Nam-gu, Incheon, KOREA

Tel No. : 82 - 32 - 860 - 6114

Section 2 - Hazards Identification

- 1) Hazard Classification Skin corrosion/irritation : 2
 Serious eye damage / Eye irritation : 2
 Specific target organ toxicity following single exposure : 2

2) Warning signal

Symbol



Signal word

Warning

Hazard statement

H315 Causes skin irritation

H319 Causes serious eye irritation

H371 May cause damage to organs

Prevention precautionary statements

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P264 Wash thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P309+P311 IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician.

P321 Specific treatment (see on this label).

P332+P313 If skin irritation occurs: Get medical advice/attention.

P337+P313 If eye irritation persists: Get medical advice/attention.

P362 Take off contaminated clothing and wash before reuse.

P405 Store locked up.

P501 Dispose of contents/container to the related laws.

3) NFPA

Health Rating 3

Flammability Rating 0

Reactivity Rating 1

Section 3 - Composition, Information on Ingredients

COMPONENT: Sodium Hydroxide

CAS No.: 1310-73-2

PERCENTAGE: < 2%

COMPONENT: Water

CAS No.: 7732-18-5

PERCENTAGE: > 98%

Section 4 - First Aid Measures

Eyes: Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Call a physician or poison control center immediately.

Skin: Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Call a physician or poison control center immediately. Wash contaminated clothing before reuse. Destroy or thoroughly clean contaminated shoes.

Ingestion: Call a physician or poison control center immediately. Do not induce vomiting without advice from poison control center. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

Inhalation: Move to fresh air. Get medical attention if symptoms persist. Apply artificial respiration if victim is not breathing. If breathing is difficult, give oxygen.

Section 5 - Fire Fighting Measures

General fire hazards: The product is non-combustible. Product is highly acidic.

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media: The product is non-combustible. Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable extinguishing media: None known.

Specific hazards arising from the chemical: Fire may produce irritating, corrosive and/or toxic gases. Product is highly caustic. Wear appropriate protective gear if spilled during fire fighting.

Special protective equipment and precautions for firefighters

Special fire fighting procedures: Move containers from fire area if you can do so without risk. Use water spray to keep fire-exposed containers cool. Cool containers exposed to flames with water until well after the fire is out.

Special protective equipment for fire-fighters: Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

Section 6 - Accidental Release Measures

Personal precautions, protective equipment and emergency procedures:

Keep unauthorized personnel away. Keep upwind. Ventilate closed spaces before entering them. Use personal protective equipment. See Section 8 of the MSDS for Personal Protective Equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.

Methods and material for containment and cleaning up:

Neutralize spill area and washings with dilute acetic acid. Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. Clean surface thoroughly to remove residual contamination. Dike far ahead of larger spill for later recovery and disposal.

Notification Procedures:

Dike for later disposal. Stop the flow of material, if this is without risk. Prevent entry into waterways, sewer, basements or confined areas. Inform authorities if large amounts are involved.

Environmental precautions:

Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so.

Section 7 - Handling and Storage

Handling: Avoid inhalation of vapors and spray mists. Do not get in eyes, on skin, on clothing. Do not eat, drink or smoke when using the product. Use only with adequate ventilation. Wash hands thoroughly after handling.

Storage: Do not store in metal containers. Keep container tightly closed in a cool, well-ventilated place. Store in a dry place.

Section 8 - Exposure Controls, Personal Protection

Skin Protection: Wear suitable protective clothing and gloves.

Eye Protection: Wear safety glasses with side shields (or goggles). Wear face shield if there is risk of splashes.

Respiratory protection: In case of inadequate ventilation use suitable respirator.

Hygiene measures: Provide eyewash station and safety shower. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing to remove contaminants. Discard contaminated footwear that cannot be cleaned.

Section 9 - Physical and Chemical Properties

Physical State: Liquid

Appearance: Colorless

Odor: Odorless

pH: 13.1

Vapor Pressure: Not available

Vapor Density: Not available

Evaporation Rate: Not available

Viscosity: Not available

Initial boiling point and boiling range: > 100 °C

Freezing/Melting Point: < 0 °C

Decomposition Temperature: Not available

Relative density : 1.02
Solubility: : Not available
Specific Gravity/Density: Not available
Molecular Formula: NaOH
Molecular Weight: 40.0

Section 10 - Stability and Reactivity

Stability:

Stable under ordinary conditions of use and storage.

Reactivity:

Reacts violently with strong acids.

Hazardous Decomposition Products:

None known.

Hazardous Polymerization:

Will not occur.

Incompatibilities:

Oxidizing agents. Acids. Contact with metals may evolve flammable hydrogen gas. Nitromethane. Halogens.

Conditions to Avoid:

Heat. Contact with incompatible materials.

Section 11 - Toxicological Information

Ingestion: May cause burns of the gastrointestinal tract if swallowed.

Inhalation: May cause damage to mucous membranes in nose, throat, lungs and bronchial system.

Skin contact: Causes severe skin burns.

Eye contact: Causes serious eye damage.

Section 12 - Ecological Information

The product may affect the acidity (pH-factor) in water with risk of harmful effects to aquatic organisms.

Environmental Toxicity:

Aquatic life

Fish	LC50 45.4 mg/l 96 hr (Sodium hydroxide)
Crustacean	LC50 40.4 mg/l 48 hr (Sodium hydroxide)

Biomagnification

Condensability	BCF -3.88 (Sodium hydroxide)
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Section 13 - Disposal Considerations

Discharge, treatment, or disposal may be subject to national, state, or local laws. Since emptied containers retain product residue, follow label warnings even after container is emptied.

Section 14 - Transport Information

UN Number : 1824
 Shipping Name: SODIUM HYDROXIDE SOLUTION
 Hazard Class: 8
 Packing Group: II
 Marine Pollutant: No
 Safety measures : F-A, S-B

Section 15 - Regulatory Information

-----\Chemical Inventory Status - Part 1\-----

Ingredient	TSCA	EC	Japan	Australia
Sodium Hydroxide (1310-73-2)	Yes	Yes	Yes	Yes
Water (7732-18-5)	Yes	Yes	Yes	Yes

-----\Chemical Inventory Status - Part 2\-----

Ingredient	Korea	--Canada--		
		DSL	NDSL	Phil.
Sodium Hydroxide (1310-73-2)	Yes	Yes	No	Yes
Water (7732-18-5)	Yes	Yes	No	Yes

-----\Federal, State & International Regulations - Part 1\-----

Ingredient	-SARA 302-		-----SARA 313-----	
	RQ	TPQ	List	Chemical Catg.
Sodium Hydroxide (1310-73-2)	No	No	No	No
Water (7732-18-5)	No	No	No	No

-----\Federal, State & International Regulations - Part 2\-----

Ingredient	CERCLA	-RCRA-	-TSCA-
		261.33	8(d)
Sodium Hydroxide (1310-73-2)	1000	No	No
Water (7732-18-5)	No	No	No

Chemical Weapons Convention: No TSCA 12(b): No CDTA: No
 SARA 311/312: Acute: Yes Chronic: Yes Fire: No Pressure: No
 Reactivity: Yes (Mixture / Liquid)

Section 16 - Other Information

Sources : KOSHA, National Emergency Management Agency
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