



# PT. SULFINDO ADIUSAHA

## MATERIAL SAFETY DATA SHEET

### CAUSTIC SODA LIQUID

Disiapkan oleh <i>[Signature]</i> 24/12/16 C. Khotun SHE Manager	Disahkan oleh <i>[Signature]</i> Collective GM	NO. DOKUMEN : TBL-QSE-SHE-001
		NO. REVISI : 1
		TGL. BERLAKU : 25 Juni 2020
		HALAMAN : 1/5

**1. Identification of the substance/preparation and the company / undertaking :**

Identification of the product

Product Name : Sodium hydroxide

Other Name : Caustic Soda Liquid

Manufacturer / Supplier identification

Company : PT. Sulfindo Adiusaha, Serang – Banten, Indonesia

Contact for information : Telp : **+6221 525 8300**

Fax : **+6221 525 8399**

Emergency phone no : **+62254 575 0035 ext 1205**

**2. Information on ingredients**

A dark, thick liquid. More dense than water. Contact may severely irritate skin, eyes, and mucous membranes. Toxic by ingestion. Corrosive to metals and tissue.

CAS-No : 1310-73-2

Molar mass : 40.00

Molecular form : NaOH

Form : Liquid

**3. Hazard identification :**

Pictogram



Signal Word

DANGER

Hazard identification :

Skin : burn

Eye : burn

Swallowed : mucous membranes

Inhalation : damage to upper respiratory tract and lung itself, producing from mild nose irritation to pneumonitis.

Precautionary Statement :

Keep away from children

Wear appropriate personal protection like Gas mask, goggles or shield of face ( Full Face). Gloves ( neoprene, PVC or nitrile).

Do not handle until all safety precaution have been read and understood

Avoid release to the environment

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#### 4. First aid measured

##### After eye contact :

If this chemical contacts the eyes, immediately wash the eyes with large amounts of water, occasionally lifting the lower and upper lids. Get medical attention immediately. Contact lenses should not be worn when working with this chemical.

##### After inhalation

If a person breathes large amounts of this chemical, move the exposed person to fresh air at once. If breathing has stopped, perform mouth-to-mouth resuscitation. Keep the affected person warm and at rest. Get medical attention as soon as possible.

##### After skin contact

If this chemical contacts the skin, immediately flush the contaminated skin with water. If this chemical penetrates the clothing, immediately remove the clothing and flush the skin with water. Get medical attention promptly.

##### After swallowing :

If this chemical has been swallowed, get medical attention immediately.

#### 5. Fire fighting measure :

##### Nature of material :

Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes. Contact with metals may involve flammable hydrogen gas.

##### Suitable extinguishing media :

Dry powder, CO<sub>2</sub>.

##### Special risk :

Non - combustible. Ambient fire may liberate hazardous vapours. Hydrogen may form upon contact with light metals (danger of explosion).

##### Special protective equipment for fire fighting :

Do not stay in dangerous zone without suitable chemical protection clothing and self-contained breathing apparatus.

#### 6. Accidental release measures :

##### Small leakage :

Neutralize with dilute acid.

##### Big leakage :

Keep material out of water sources and sewers. Build dikes to contain flow as necessary. Apply water spray or mist to knock down vapors. Land spill: Dig a pit, pond, lagoon, holding area to contain liquid or solid material. Dike surface using soil, sand bags, foamed polyurethane, or foamed concrete. Absorb bulk liquid with fly ash or cement powder. Neutralize with vinegar or other dilute acid. Water spill: Neutralize with dilute acid.



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Personal Protective Equipment used:

Wear appropriate eye protection to prevent eye contact like goggle or shield of face (Full Face), Gas mask, Gloves ( neoprene, PVC or nitrile).

7. Handling and storage :

Handling :

No further requirements.

Storage

Tightly closed. Dry. Protected from air. Above 0°C

Requirements for storage rooms and containers :

No aluminium, tin, or zinc containers.

8. Exposure control / personal protection :

Technical exposure :

Neutralize with dilute acid.

Personal protective equipment :

Gas mask, goggles or shield of face ( Full Face), Gloves ( neoprene, PVC or nitrile).

9. Physical and chemical properties :

Form

Liquid

Colour

Colourless liquid

Odor

Odorless

pH value (20°C)

near 14

Melting temperature

605° F

Boiling temperature

288° F to 298° F at 760 mm/Hg

Ignition temperature

not available

Flash point

not available

Explosion limit lower

not available

upper

not available

Relative vapour density

not available

Specific gravity

1.5 at 68° F

Solubility in water

42 g/100 ml at 0°C and 347 g/ml at 100°C

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#### 10. Stability and reactivity

##### Reactivity :

Slowly absorbs carbon dioxide from the air to give solid products as crusts or precipitates. Water soluble. Dilution with water liberates heat, possibly enough to cause local boiling and spattering.

##### Stability :

Unstable if heated

Condition to be avoided :

no information available

Substances to be avoided :

Organic and inorganic acids, organic and inorganic acid anhydrides, sulfur dioxide, sulfur trioxide, phosphorus trioxide, phosphorus pentoxide, and organic and inorganic acid chlorides. metals such as zinc and aluminium, light metals : formation of hydrogen (risk of explosion), ammonium compounds : formation of ammonia.

#### 11. Toxicological information :

Quantitative data on the toxicity of this product are not available

After skin contact : burns, necrosis

After eye contact : burns, necrosis, risk of blindness

After swallowing : burns of mouth, mucous membranes, oesophagus. Risk of perforation in the oesophagus stomach.

Systemic effect collapse, death

Further data

The product should be handled with the care usual when dealing with chemicals

#### 12. Ecological information :

Biological effects : toxic effect on fish and plankton. Harmful effect due to pH shift. Death of fish possible. Does not cause biological oxygen deficit. Neutralization possible in WWTP.

Fish toxicity : LC50 : 189 mg/l (1 N solution = 40 g/l)

LD50 rat / oral : 220 mg/kg ( Qmax solution inc. 2007 )

Further ecological data :

Do not allow to enter drinking water supplies, waste water or soil.



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#### 13. Disposal Consideration

There are no uniform EC Regulations for the disposal of chemical or residues. Chemical residues generally count as special waste. The disposal of the latter is regulated in the EC member countries through corresponding laws and regulations. We recommend that you contact either the authorities in charge or approved waste disposal companies which will advise you on how to dispose of special

##### Packaging:

Disposal in compliance with official regulations. Handle contaminated packaging in the same way as the substance itself. If not officially specified differently, non contaminated packaging may be treated like household waste or recycled.

#### 14. Transport information

International Rules :

DOT rules or your country rules.

Transport over land :

Cylinder tank

Sea transportation :

Ship tanker

Air transportation :

no available

#### 15. Regulatory Information :

Ministry of Indonesian Man Regulation No. KEP. 187/MEN/1999 about Controlling of Hazardous Chemical Materials in Working Place, section III about Determined of Hazardous Potential of Refer to The Government of Republic Indonesia regulation ( number 74 year 2001 ) for Handling of Hazardous Materials.

#### 16. Other Information :

##### **Revision 1, June 2020**

The information given corresponds to the current state of our knowledge and experience of the product.

This applies to product which conforms to the specification, unless otherwise stated.

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