

SAFETY DATA SHEET

1.0 N NaOH

1. Identification of the substance and of the supplier

Product identifier

Chemical name 1.0 N NaOH

Recommended use of the chemical and

restrictions on use

Manufacturer/ supplier details

Company name

Ya Thai Chemical Co., Ltd.
78/9 Moo 5 Takam, Bangpakong,
Chachoengsao 24130 THAILAND

Phone number 66-3857-4400

Fax 66-3857-3700

2. Hazard Identification

Emergency phone number

GHS classification of the substance/ mixture

Health hazards

Skin corrosion/ irritation Category 2

Other hazard than mentioned above are "Not classified", "Classification not possible" or "Not applicable".

GHS label elements

Pictogram



Signal word Warning

Hazard statements

H315 Causes skin irritation.

Precautionary statements

Prevention

P264 Wash face, hands and any exposed skin thoroughly after handling.

P280 Wear protective gloves.

Response

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

P332+P317 If skin irritation occurs: Get medical help.

P362+P364 Take off contaminated clothing and wash it before reuse.

3. Composition/Information on Ingredients

Substance/ mixture	Mixture (liquid)			
Components		CAS No.	Concentration %	
Sodium hydroxide		1310-73-2	2-4	

Water 7732-18-5 96-98

4. First Aid Measures

Description of first aid measure

Inhalation

Move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

Skin contact

Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician.

Eye contact

Check remove contact lenses if possible to do. Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

Ingestion

Rinse mouth with water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Consult a physician.

Most important symptoms and effects, both acute and delayed

This substance is irritating to the eyes, skin, respiratory tract and ingestion.

If repeated or prolonged contact with skin may cause dermatitis.

Indication of any immediate medical attention and special treatment needed Treat symptomatically.

5. Fire Fighting Measures

Extinguishing media

Suitable extinguishing media

In case of fire in the surroundings, use appropriate extinguishing media.

Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide.

Unsuitable extinguishing media

No information available.

Special hazards arising from the substance or mixture

Gives off irritating or toxic fumes (or gases) in a fire.

When heated to decomposition it emits toxic fumes of sodium oxide.

Special protective equipment and precautions for fire-fighters

Wear self-contained breathing apparatus (SCBA) for firefighting if necessary.

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Use personal protective equipment as required.

Keep unprotected persons away.

In case of insufficient ventilation, wear suitable respiratory equipment.

Environmental precautions

Do not let product enter drains. Keep water away from release.

Stop or control the leak, if this can be done without undue risk.

Methods and materials for containment and cleaning up

Liquid form, collect for reclamation or absorb in vermiculite, dry sand, earth, or a similar material.

For small spills, add absorbent or sand, scoop up material and place in a sealable, liquid-proof container for disposal. For large spills, contain material to ensure runoff does not reach a waterway. Place spilled material in an appropriate container for disposal.

7. Handling and Storage

Precautions for safe handling

Use personal protective equipment as required.

Avoid contact with eyes, skin and clothing.

Wash face, hands and any exposed skin thoroughly after handling.

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

In case of insufficient ventilation, wear suitable respiratory equipment.

Conditions for safe storage, including any incompatibilities

Keep container tightly closed. Keep container in room temperature, well-ventilated area. Avoid storage in direct sunlight.

8. Exposure Controls/ Personal Protection

Control parameters

Component	ACGIH (TLV)	NIOSH (REL)	OSHA (PEL)
Sodium hydroxide	- Ceiling: 2 mg/m ³ [1992]	- Ceiling: 2 mg/m ³	- TWA: 2 mg/m ^{3 (see 29 CFR}
1310-73-2		- IDLH: 10 mg/m ³	1910.1000 Table Z-1)

ACGIH: American Conference of Governmental Industrial Hygienists

OSHA: Occupational Safety and Health Administration

NIOSH IDLH: The National Institute for Occupational Safety and Health - Immediately Dangerous to Life or Health

Appropriate engineering controls

Use ventilation, local exhaust ventilation.

Personal protective equipment

Respiratory protection Use local exhaust or respirator masks.

Skin protection Protective gloves.

Eye/ face protection Wear safety goggles, safety glasses.

Body protection Chemical suit, boots, aprons.

Work/ hygienic practices

Handle in accordance with good industrial hygiene and safety practice.

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

Wash face, hands and any exposed skin thoroughly after handling.

Regular cleaning of equipment, work area and clothing is recommended.

9. Physical and Chemical Properties

Appearance and colour

Odour

Odourless

Odour threshold

pH

12.00-15.00

Melting point/ freezing point

Liquid, colourless

Odourless

Not available

Boiling point

Flash point

Evaporation rate

Flammability

Upper/ lower flammability or explosive limits

Vapour pressure

Not available

Not available

Not available

Not available

Vapour pressure

Vapour density

Not available

Not available

1.03-1.06 at 25 °C

Water solubility Not available Partition coefficient: n-octanol/water log Pow Not available

Auto ignition temperature Not available Decomposition temperature Not available

Viscosity Not available

10. Stability and Reactivity

Reactivity

Not available.

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

Will not occurred.

Conditions to avoid

Not available.

Incompatible materials

Incompatible with strong acids, corrosive to metals such as aluminum, tin, lead and zinc.

Hazardous decomposition products

When heated to decomposition it emits toxic fumes of sodium oxide.

11. Toxicological Information

Numerical measures of toxicity

Classification of health hazards

Acute toxicity

Acute oral toxicity

Acute dermal toxicity

Acute inhalation toxicity

Not classified.

Not classified.

Skin corrosion/ irritation H315 Causes skin irritation.

Serious eye damage/ eye irritation All ingredients in this mixture are not serious eye

damage/ eye irritation effect.

Respiratory or skin sensitization All ingredients in this mixture are not respiratory or

skin sensitization effect.

Germ cell mutagenicityAll ingredients in this mixture are not germ cell

mutagenicity effect.

CarcinogenicityAll ingredients in this mixture are not

carcinogenicity effect.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Components	ACGIH	IARC	NTP	OSHA
Sodium hydroxide 1310-73-2	Not listed	Not listed	Not listed	Not listed

Reproductive toxicityAll ingredients in this mixture are not reproductive

toxicity effect.

Specific target organ toxicity

(single exposure)

Specific target organ toxicity

(repeated exposure)
Aspiration hazard

All ingredients in this mixture are not specific target organ toxicity (single exposure) effect. All ingredients in this mixture are not specific target organ toxicity (repeated exposure) effect. All ingredients in this mixture are not aspiration

hazard effect.

12. Ecological Information

Ecotoxicity

Components	Algae/ aquatic plants	Fish	Crustacea
Sodium hydroxide 1310-73-2	-	- Gambusia affinis (western mosquitofish): LC ₅₀ 125 mg/L/96hr ^{static}	- Daphnia magna (water flea): NOEC 156 mg/l/48hr

Acute (short-term) aquatic hazard Summation method:

- Sodium hydroxide: LC_{50} 125 mg/L/96hr: $EC50_{mix}$: >100 mg/l = Classified not possible

Gambusia affinis (fish)

Long-term aquatic hazard

Persistence and degradability

Bio-accumulative potential

Mobility in soil

Other adverse effects

Environmental effects

Not classified

Not available

Not available

Not available

13. Disposal Consideration

Waste treatment methods

Dispose in accordance with local/ national/ international regulations.

Contaminated packaging

Dispose of as unused product.

Dispose of container in accordance with local/ national/ international regulations.

14. Transport Information

International regulation

UN number UN 1824

UN proper shipping nameSodium hydroxide solution

Transport hazard class 8
Packaging group II

Environmental hazardsNot availableTransport in bulkNot availableSpecial precautions for userNot available

15. Regulatory Information

Safety, health and environmental regulations/ legislation specific for the substance or mixture

Thailand

Notification of Ministry of Industry Subject: List of hazardous substances B.E. 2556

(2013) (Annex 5.1)

Sodium hydroxide CAS 1310-73-2 (when

concentration >20% w/w is classified as type 1, but concentration specified in this product not classified

as type 1)

This chemical not listed on the hazardous

substances inventory.

Thailand

Notification of Ministry of Labour Subject: List of hazardous chemicals

B.E. 2556 (2013)

Sodium hydroxide CAS 1310-73-2 (No.1287) Is listed on the hazardous chemicals inventory.

Chemical safety assessment

For this product a chemical safety assessment was not carried out.

16. Other Information

Created Reference

February 22, 2023

- Issued: 22/02/23
- GHS Classification Data from NIH (National Institutes of Health) Web Site: https://pubchem.ncbi.nlm.nih.gov/
- 2) https://echa.europa.eu/home
- 3) http://www.inchem.org/
- 4) https://www.osha.gov/chemicaldata/index.html
- 5) https://cfpub.epa.gov/ecotox/
- 6) Thailand: Notification of Ministry of Industry Subject: List of hazardous substances B.E. 2556 (2013) (Annex 5.1)
- 7) Thailand: Notification of Ministry of Labour Subject: List of hazardous chemicals B.E. 2556 (2013)

NOTE:

This information herein is given in good faith, but no warranty, express or implied, is made. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used in caution. Although certain hazards are described herein. We cannot quarantine that These are the only hazards which exist.