



SAFETY DATA SHEET

1.0 M Sodium hydroxide**1. Identification of the substance and of the supplier****Product identifier**

Chemical name 1.0 M Sodium hydroxide

Recommended use of the chemical and restrictions on use

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Manufacturer/ supplier details

Company name **Ya Thai Chemical Co., Ltd.**
 Company address 78/9 Moo 5 Takam, Bangpakong,
 Chachoengsao 24130 THAILAND
 Phone number 66-3857-4400
 Fax 66-3857-3700
 Emergency phone number -

2. Hazard Identification**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.

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 a cool, well-ventilated area.

8. Exposure Controls/ Personal Protection

Control parameters

Component	ACGIH (TLV)	NIOSH (REL)	OSHA (PEL)
Sodium hydroxide 1310-73-2	- Ceiling: 2 mg/m ³ [1992]	- Ceiling: 2 mg/m ³ - IDLH: 10 mg/m ³	- TWA: 2 mg/m ³ (see 29 CFR 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	Liquid, colourless
Odour	Odourless
Odour threshold	Not available
pH	12.00-15.00
Melting point/ freezing point	Not available
Boiling point	Not available
Flash point	Not flammable
Evaporation rate	Not available
Flammability	Not available
Upper/ lower flammability or explosive limits	Not available
Vapour pressure	Not available
Vapour density	Not available
Specific gravity	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

Not classified.

Acute dermal toxicity

Not classified.

Acute inhalation toxicity

Not classified.

Skin corrosion/ irritation

H315 Causes skin irritation.

Serious eye damage/ eye irritation

All ingredients in this mixture are not respiratory or skin sensitization effect.

Respiratory or skin sensitization

All ingredients in this mixture are not respiratory or skin sensitization effect.

Germ cell mutagenicity

All ingredients in this mixture are not germ cell mutagenicity effect.

Carcinogenicity

All 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 toxicity

All ingredients in this mixture are not reproductive toxicity effect.

Specific target organ toxicity (single exposure)

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

Specific target organ toxicity (repeated exposure)

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

Aspiration hazard

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/96h ^{static} - Poecilia reticulata (guppy) NOEC 56 mg/L/96h	- Ceriodaphnia quadrangular (crustacea): LC ₅₀ 40 mg/L/48h - Ceriodaphnia dubia (water flea): EC ₅₀ 40.38 mg/L/48h ^{static} - Daphnia magna (water flea): NOEC 156 mg/L/48h ^{static}

Acute (short-term) aquatic hazard

- Sodium hydroxide: LC₅₀ 125 mg/L/96hr:
Gambusia affinis (fish)

Long-term aquatic hazard**Persistence and degradability****Bio-accumulative potential****Mobility in soil****Other adverse effects****Environmental effects****Summation method:**

EC₅₀mix: >100 mg/l = Classified not possible

Not classified

Not available

Not available

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 name

Sodium hydroxide solution

Transport hazard class

8

Packaging group

II

Environmental hazards

Not available

Transport in bulk

Not available

Special precautions for user

Not 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 October 20, 2023

Reference

- 1) 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.