



SAFETY DATA SHEET

According to JIS Z 7253:2019 **Revision date** 01-Mar-2024 Revision Number 1.02

Section 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name	Sodium Hydroxide
Product Code	195-18895
Supplier	FUJIFILM Wako Pure Chemical Corporation
	1-2 Doshomachi 3-Chome, Chuo-ku, Osaka 540-8605, Japan Phone: +81-6-6203-3741
	Fione: +81-6-6203-2029
Emergency telephone number	+81-6-6203-3741 / +81-3-3270-8571
Recommended uses	Food additives
Restrictions on use	Seek expert judgment when using for purposes other than those recommended.

Section 2: HAZARDS IDENTIFICATION

GHS classification <u>Classification of the substance or mixture</u> Skin corrosion/irritation Serious eye damage/eye irritation Specific target organ toxicity (single exposure) <u>Category 1</u> respiratory system Acute aquatic toxicity

Category 1 Category 1 Category 1

Category 3



Hazard statements

- H314 Causes severe skin burns and eye damage
- H318 Causes serious eye damage
- H402 Harmful to aquatic life
- H370 Causes damage to the following organs: respiratory system

Precautionary statements-(Prevention)

- Wear protective gloves/protective clothing/eye protection/face protection
- Do not breathe dust/fume/gas/mist/vapors/spray
- · Wash face, hands and any exposed skin thoroughly after handling
- · Do not eat, drink or smoke when using this product
- Avoid release to the environment

Precautionary statements-(Response)

• 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

- IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
- Wash contaminated clothing before reuse
- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting

Precautionary statements-(Storage)

Store locked up

Precautionary statements-(Disposal)

Dispose of contents/container to an approved waste disposal plant

Others

Other hazards

Not available

NaOH

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

Single Substance or Mixture Substance

Formula

Chemical Name	Weight-%	Molecular weight	ENCS	ISHL No.	CAS RN
Sodium Hydroxide	95.0	40.00	(1)-410	*	1310-73-2
Note on ISHL No.: * in the table means announced chemical substances.					

Section 4: FIRST AID MEASURES

Inhalation

Remove to fresh air. If symptoms persist, call a physician.

Skin contact

Wash off immediately with soap and plenty of water. If symptoms persist, call a physician.

Eye contact

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediate medical attention is required.

Ingestion

Rinse mouth. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately. Do not induce vomiting without medical advice.

Protection of first-aiders

Use personal protective equipment as required.

Section 5: FIRE FIGHTING MEASURES

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment **Unsuitable extinguishing media**

No information available

Specific hazards arising from the chemical product

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

Special extinguishing method

No information available

Special protective actions for fire-fighters

Use personal protective equipment as required. Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

Section 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

For indoor, provide adequate ventilation process until the end of working. Deny unnecessary entry other than the people involved by, for example, using a rope. While working, wear appropriate protective equipments to avoid adhering it on skin, or inhaling the gas. Work from windward, and retract the people downwind.

Methods and materials for contaminent and methods and materials for cleaning up Sweep up and gather scattered particles, and collect it in an empty airtight container. Recoverly, neutralization No information available Secondary disaster prevention measures Clean contaminated objects and areas thoroughly observing environmental regulations. Section 7: HANDLING AND STORAGE Handling **Technical measures** Avoid contact with strong acids. Use with local exhaust ventilation. Precautions Do not rough handling containers, such as upsetting, falling, giving a shock, and dragging. Prevent leakage, overflow, and scattering. Not to generate steam and dust in vain. Seal the container after use. After handling, wash hands and face, and then gargle. In places other than those specified, should not be smoking or eating and drinking. Should not be brought contaminated protective equipment and gloves to rest stops. Deny unnecessary entry of non-emergency personnel to the handling area. Safety handling precautions Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. Storage

To be careful not discharged to the environment without being properly handled waste water contaminated.

Safe storage conditions Storage conditions

Environmental precautions

Safe packaging material Incompatible substances

Store away from sunlight in well-ventilated place at room temperature (preferably cool). Keep container tightly closed. Store locked up. Polyethylene Strong acids

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering controls

In case of indoor workplace, seal the source or use a local exhaust system. Provide the safety shower facility, and handand eye-wash facility. And display their position clearly.

Exposure limits

Chemical Name	JSOH (Japan)	ISHL (Japan)	ACGIH
Sodium Hydroxide	Ceiling: 2 mg/m ³	N/A	Ceiling: 2 mg/m ³
1310-73-2			

Personal protective equipment

Respiratory protection Hand protection Eye protection Skin and body protection Dust mask (JIS T 8151) chemical protective gloves (JIS T 8116) protective eyeglasses or chemical safety goggles (JIS T 8147) Long-sleeved work clothes

General hygiene considerations

Handle in accordance with good industrial hygiene and safety practice.

If this product is classified as "Chemical Substances Hazardous to Skin, etc.", use appropriate protective equipment to them.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Form Color Appearance Odor

white Small spherical , flakes , stick , another mass or powder no data available Melting point/freezing point Boiling point, initial boiling point and boiling range Flammability Evaporation rate: Flammability (solid, gas): Upper/lower flammability or explosive limits Upper: Lower: Flash point Auto-ignition temperature: **Decomposition temperature:** pН Viscosity (coefficient of viscosity) Dynamic viscosity Solubilities n-Octanol/water partition coefficient:(log Pow) Vapour pressure Specific Gravity / Relative density Vapour density **Particle characteristics**

1390 °C no data available Strongly basic (aq.) no data available no data available water : Very soluble. Ethanol : free soluble . no data available no data available 2.13 no data available no data available

Section 10: STABILITY AND REACTIVITY

318 °C

Stability

Reactivityno data asChemical stabilityStable undHazardous reactionsStable undNone under normal processingConditions to avoidConditions to avoidExtremes of temperature and direct sunlightIncompatible materialsStrong acidsHazardous decomposition productsNo information available

no data available Stable under recommended storage conditions.

Section 11: TOXICOLOGICAL INFORMATION

Acute toxicity

Chemical Name	Acute toxicity -oral- source information	Acute toxicity -dermal- source information	Acute toxicity -inhalation gas- source information
Sodium Hydroxide			Based on the NITE GHS classification results.
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Chemical Name	Acute toxicity -inhalation vapor- source information	Acute toxicity -inhalation dust- source information	Acute toxicity -inhalation mist- source information
Sodium Hydroxide	Based on the NITE GHS	Based on the NITE GHS	Based on the NITE GHS

classification results.

classification results.

Skin irritation/corrosion

Chemical Name	Skin corrosion/irritation source information
Sodium Hydroxide	Based on the NITE GHS classification results.
Serious eye damage/ irritation	
Chemical Name	Serious eye damage/irritation source information
Sodium Hydroxide	Based on the NITE GHS classification results.
Respiratory or skin sensitization	
Chemical Name	Respiratory or Skin sensitization source information
Sodium Hydroxide	Based on the NITE GHS classification results.

classification results.

Reproductive cell mutagenicity

Chemical Name	germ cell mutagencity source information
Sodium Hydroxide	Based on the NITE GHS classification results.
Carcinogenicity	
Chemical Name	Carcinogenicity source information
Sodium Hydroxide	Based on the NITE GHS classification results.
Reproductive toxicity	
Chemical Name	Reproductive toxicity source information
Sodium Hydroxide	Based on the NITE GHS classification results.
STOT-single exposure	
Chemical Name	STOT -single exposure- source information
Sodium Hydroxide	Based on the NITE GHS classification results.
STOT-repeated exposure	
Chemical Name	STOT -repeated exposure- source information
Sodium Hydroxide	Based on the NITE GHS classification results.
Aspiration hazard	
Chemical Name	Aspiration Hazard source information
Sodium Hydroxide	Based on the NITE GHS classification results.

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Sodium Hydroxide	N/A	N/A	LC50 : Ceriodaphnia pulchella
			40 ma/L 48 h

Other data

Chemical Name	Short-term (acute) hazardous to the	Long-term (chronic) hazardous to the
	aquatic environment source information	aquatic environment source information
Sodium Hydroxide	Based on the NITE GHS classification	Based on the NITE GHS classification
	results.	results.

Persistence and degradability Bioaccumulative potential Mobility in soil Hazard to the ozone layer No information available No information available No information available No information available

Section 13: DISPOSAL CONSIDERATIONS

Waste from residues

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated container and contaminated packaging

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Section 14: TRANSPORT INFORMATION

ADR/RID

UN number	UN1823
Proper shipping name:	Sodium hydroxide, solid
UN classfication	8
Subsidiary hazard class	
Packing group	II
Marine pollutant	Not applicable

IMDG

UN number	UN1823
Proper shipping name:	Sodium hydroxide, solid
UN classfication	8
Subsidiary hazard class	
Packing group	II
Marine pollutant (Sea)	Not applicable
Transport in bulk according to	No information available
Annex II of MARPOL 73/78 and	
the IBC Code	
ΙΑΤΑ	
UN number	UN1823
Proper shipping name:	Sodium hydroxide, solid
UN classfication	8
Subsidiary hazard class	
Packing group	II
Environmentally Hazardous	Not applicable
Substance	

Section 15: REGULATORY INFORMATION

Japanese regulations	
Fire Service Act	Not applicable
Poisonous and Deleterious	Deleterious Substances 2nd. Grade
Substances Control Law	
Industrial Safety and Health Act	t Harmful Substances Whose Names Are to be Indicated on the Label (Law Art.57)
-	Notifiable Substances (Law Art.57-2)
Industrial Safety and Health Act ([2024.4.1~] Chemical Substances Hazardous to Skin, etc.(Regulations Article 594-2 Paragraph 1)
2024~)	
Regulations for the carriage	Corrosive Substances (Ordinance Art.3, Ministry of Transportation Ordinance Regarding
and storage of dangerous	Transport by Ship and Storage, Attached Table 1)
goods in ship	
Civil Aeronautics Law	Corrosive Substances (Ordinance Art. 194, MITL Nortification for Air Transportation of
	Explosives etc., Attached Table 1)
Marine Pollution Prevention	Enforcement ordinance Appendix No. 1 Noxious liquid substance Category Y
Law	
Pollutant Release and Transfer	Not applicable
Register Law	
(2023.4.1-)	
Water Pollution Control Act	Specified substances(Law Art.2 Para.4, Enforcement Order Art.3-3)
Export Trade Control Order	Not applicable

Chemical Name	Poisonous and Deleterious Substances Control Law	Industrial Safety and Health Act Substances (Law Art.57-2)	Pollutant Release and Transfer Register Law (2023.4.1-)
Sodium Hydroxide 1310-73-2(95.0)	Applicable	Applicable	-

	Section 16: OTHER INFORMATION
Key literature references and sources for data etc.	NITE: National Institute of Technology and Evaluation (JAPAN) http://www.safe.nite.go.jp/japan/db.html IATA dangerous Goods Regulations RTECS:Registry of Toxic Effects of Chemical Substances Japan Industrial Safety and Health Association GHS Model SDS Dictionary of Synthetic Oraganic Chemistry , SSOCJ, Koudansha Scientific Co.Ltd. Chemical Dictionary, Kyouritsu Publishing Co., Ltd. etc

Record of SDS revisions Disclaimer

The following contents were revised. Regulatory information.

This SDS is according to JIS Z 7253: 2019. The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

GHS Classification is according to JIS Z 7252:2019. *JIS: Japanese Industrial Standards

End of Safety Data Sheet