

## SAFETY DATA SHEET

According to JIS Z 7253:2019  
Revision date 04-Sep-2024  
Revision Number 1.05

## Section 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name	Sodium Hydrogen Carbonate
Product Code	194-01317,198-01315

**Supplier** FUJIFILM Wako Pure Chemical Corporation  
1-2 Doshomachi 3-Chome, Chuo-ku, Osaka 540-8605, Japan  
Phone: +81-6-6203-3741  
Fax: +81-6-6203-2029

**Emergency telephone number** +81-6-6203-3741 / +81-3-3270-8571

**Recommended uses** For research use only

**Restrictions on use** Seek expert judgment when using for purposes other than those recommended.

## Section 2: HAZARDS IDENTIFICATION

**GHS classification****Classification of the substance or mixture**

Not a hazardous substance or mixture according to the Globally Harmonized System (GHS)

**Pictograms**

**Signal word** None

**Hazard statements**

Not a hazardous substance or mixture according to the Globally Harmonized System (GHS)

**Precautionary statements-(Prevention)**

- Not applicable

**Precautionary statements-(Response)**

- Not applicable

**Precautionary statements-(Storage)**

- Not applicable

**Precautionary statements-(Disposal)**

- Not applicable

**Others**

**Other hazards** Not available

## Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

**Single Substance or Mixture** Substance

**Formula** NaHCO<sub>3</sub>

Chemical Name	Weight-%	Molecular weight	ENCS	ISHL No.	CAS RN
Sodium Hydrogen Carbonate	99.0	84.01	(1)-164	*	144-55-8

**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.

**Environmental precautions**

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

**Methods and materials for contaminant and methods and materials for cleaning up**

Sweep up and gather scattered particles, and collect it in an empty airtight container.

**Recovery, 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 acidic substances 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**

Avoid contact with skin, eyes or clothing. Use personal protective equipment as required.

### Storage

#### Safe storage conditions

##### Storage conditions

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

##### Safe packaging material

Polypropylene, Polyethylene

##### Incompatible substances

Acidic substances

## 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 hand- and eye-wash facility. And display their position clearly.

### Exposure limits

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

### Personal protective equipment

#### Respiratory protection

Dust mask ( JIS T 8151 )

#### Hand protection

chemical protective gloves ( JIS T 8116 )

#### Eye protection

protective eyeglasses or chemical safety goggles (JIS T 8147)

#### Skin and body protection

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

white

#### Appearance

crystalline powder

### Odor

Odorless

### Melting point/freezing point

270 °C

### Boiling point, initial boiling point and boiling range

no data available

### Flammability

no data available

### Evaporation rate:

no data available

### Flammability (solid, gas):

no data available

### Upper/lower flammability or explosive limits

#### Upper:

no data available

#### Lower:

no data available

### Flash point

no data available

### Auto-ignition temperature:

no data available

### Decomposition temperature:

> 50 °C

### pH

abt. 8 (aq.)

### Viscosity (coefficient of viscosity)

no data available

### Dynamic viscosity

no data available

### Solubilities

water : soluble . Ethanol : practically insoluble, or insoluble .

### n-Octanol/water partition coefficient:(log Pow)

no data available

### Vapour pressure

no data available

### Specific Gravity / Relative density

2.159

### Vapour density

no data available

### Particle characteristics

no data available

## Section 10: STABILITY AND REACTIVITY

### Stability

**Reactivity** no data available  
**Chemical stability** Stable under recommended storage conditions.

**Hazardous reactions**  
 Reacts violently with acids.

**Conditions to avoid**  
 Extremes of temperature and direct sunlight

**Incompatible materials**  
 Acidic substances

**Hazardous decomposition products**  
 Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>)

## Section 11: TOXICOLOGICAL INFORMATION

\*NITE: National Institute of Technology and Evaluation (JAPAN)  
[https://www.chem-info.nite.go.jp/en/chem/chrip/chrip\\_search/srhInput](https://www.chem-info.nite.go.jp/en/chem/chrip/chrip_search/srhInput)

### Acute toxicity

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Sodium Hydrogen Carbonate	> 4,000 mg/kg (Rat)	> 2,000 mg/kg (Rat)	5.33 mg/L (Rat) 4h

Chemical Name	Acute toxicity -oral- source information	Acute toxicity -dermal- source information	Acute toxicity -inhalation gas- source information
Sodium Hydrogen Carbonate	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.

Chemical Name	Acute toxicity -inhalation vapor- source information	Acute toxicity -inhalation dust- source information	Acute toxicity -inhalation mist- source information
Sodium Hydrogen Carbonate	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.

### Skin irritation/corrosion

Chemical Name	Skin corrosion/irritation source information
Sodium Hydrogen Carbonate	Based on the NITE GHS classification results.

### Serious eye damage/ irritation

Chemical Name	Serious eye damage/irritation source information
Sodium Hydrogen Carbonate	Based on the NITE GHS classification results.

### Respiratory or skin sensitization

Chemical Name	Respiratory or Skin sensitization source information
Sodium Hydrogen Carbonate	Based on the NITE GHS classification results.

### Reproductive cell mutagenicity

Chemical Name	germ cell mutagenicity source information
Sodium Hydrogen Carbonate	Based on the NITE GHS classification results.

### Carcinogenicity

Chemical Name	Carcinogenicity source information
Sodium Hydrogen Carbonate	Based on the NITE GHS classification results.

### Reproductive toxicity

Chemical Name	Reproductive toxicity source information
Sodium Hydrogen Carbonate	Based on the NITE GHS classification results.

### STOT-single exposure

Chemical Name	STOT -single exposure- source information
Sodium Hydrogen Carbonate	Based on the NITE GHS classification results.

### STOT-repeated exposure

Chemical Name	STOT -repeated exposure- source information
Sodium Hydrogen Carbonate	Based on the NITE GHS classification results.

### Aspiration hazard

Chemical Name	Aspiration Hazard source information
Sodium Hydrogen Carbonate	Based on the NITE GHS classification results.

## Section 12: ECOLOGICAL INFORMATION

\*NITE: National Institute of Technology and Evaluation (JAPAN)  
[https://www.chem-info.nite.go.jp/en/chem/chrip/chrip\\_search/srhInput](https://www.chem-info.nite.go.jp/en/chem/chrip/chrip_search/srhInput)

**Ecotoxicity**

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Sodium Hydrogen Carbonate	N/A	LC50 : <i>Oncorhynchus mykiss</i> 7,700 mg/L 96 h	EC50 : <i>Ceriodaphnia dubia</i> 1,020 mg/L 48 h

**Other data**

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

**Persistence and degradability** No information available  
**Bioaccumulative potential** No information available  
**Mobility in soil** No information available  
**Hazard to the ozone layer** 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** Not regulated  
**UN number** -  
**Proper shipping name:** -  
**UN classification** -  
**Subsidiary hazard class** -  
**Packing group** -  
**Marine pollutant** Not applicable

**IMDG** Not regulated  
**UN number** -  
**Proper shipping name:** -  
**UN classification** -  
**Subsidiary hazard class** -  
**Packing group** -  
**Marine pollutant (Sea)** Not applicable  
**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** No information available

**IATA** Not regulated  
**UN number** -  
**Proper shipping name:** -  
**UN classification** -  
**Subsidiary hazard class** -  
**Packing group** -  
**Environmentally Hazardous Substance** Not applicable

### Section 15: REGULATORY INFORMATION

**Japanese regulations**

<b>Fire Service Act</b>	Not applicable
<b>Poisonous and Deleterious Substances Control Law</b>	Not applicable
<b>Industrial Safety and Health Act</b>	Not applicable
<b>Regulations for the carriage and storage of dangerous goods in ship</b>	Not applicable
<b>Civil Aeronautics Law</b>	Not applicable
<b>Pollutant Release and Transfer Register Law (2023.4.1-)</b>	Not applicable
<b>Export Trade Control Order</b>	Not applicable

**Section 16: OTHER INFORMATION****Key literature references and sources for data etc.**

NITE: National Institute of Technology and Evaluation (JAPAN)  
[https://www.chem-info.nite.go.jp/en/chem/chrip/chrip\\_search/srhInput](https://www.chem-info.nite.go.jp/en/chem/chrip/chrip_search/srhInput)  
IATA dangerous Goods Regulations  
RTECS:Registry of Toxic Effects of Chemical Substances  
Japan Industrial Safety and Health Association GHS Model SDS  
Dictionary of Synthetic Organic Chemistry , SSOCJ, Koudansha Scientific Co.Ltd.  
Chemical Dictionary, Kyouritsu Publishing Co., Ltd.  
etc

**Record of SDS revisions**

The following contents were revised. Product and company Identification.  
Composition/information on ingredients. Handling and storage. Exposure controls/personal protection. Stability and reactivity. Regulatory information.

**Disclaimer**

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**