

## SAFETY DATA SHEET

According to JIS Z 7253:2012  
**Revision Date** 01-Nov-2019  
 Version 6.01

## Section 1: PRODUCT AND COMPANY IDENTIFICATION

<b>Product name</b>	Sodium Hydrogensulfite
<b>Product code</b>	196-01377,196-01372,190-01375,198-01371
<b>CAS RN</b>	7631-90-5

<b>Manufacturer</b>	FUJIFILM Wako Pure Chemical Corporation 1-2 Doshomachi 3-Chome Chuo-ku, Osaka 540-8605, Japan Phone: +81-6-6203-3741 Fax: +81-6-6203-5964
<b>Supplier</b>	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
<b>Emergency telephone number</b>	+81-6-6203-3741 / +81-3-3270-8571
<b>Recommended uses and restrictions on use</b>	For research purposes

## Section 2: HAZARDS IDENTIFICATION

## GHS classification

Classification of the substance or mixture

Acute toxicity - Oral

Category 4

Respiratory sensitization

Category 1

Skin sensitization

Category 1

Specific target organ toxicity (single exposure)

Category 3

Category 3 Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Category 1

Category 1 respiratory system

## Pictograms



Signal word

Danger

## Hazard statements

H302 - Harmful if swallowed

H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled

H335 - May cause respiratory irritation

H317 - May cause an allergic skin reaction

H372 - Causes damage to the following organs through prolonged or repeated exposure: respiratory system

## Precautionary statements-(Prevention)

- Wash face, hands and any exposed skin thoroughly after handling
- Do not eat, drink or smoke when using this product
- In case of inadequate ventilation wear respiratory protection
- Contaminated work clothing should not be allowed out of the workplace

- Protective gloves
- Do not breathe dust/fume/gas/mist/vapors/spray
- Use only outdoors or in a well-ventilated area

**Precautionary statements-(Response)**

- Get medical advice/attention if you feel unwell
- IF ON SKIN: Wash with plenty of soap and water
- If skin irritation or rash occurs: Get medical advice/attention
- Wash contaminated clothing before reuse.
- If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician
- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
- Rinse mouth.

**Precautionary statements-(Storage)**

- Store in a well-ventilated place. Keep container tightly closed
- Store locked up.

**Precautionary statements-(Disposal)**

- Dispose of contents/container to an approved waste disposal plant

**Others**

**Other hazards** Not available

### Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

**Single Substance or Mixture** Mixture

Chemical Name	Weight-%	Molecular weight	ENCS	ISHL No.	CAS RN
Sodium Hydrogen Sulfite	<100	104.06	(1)-502	公表	7631-90-5
Sodium Disulfite	<100	190.11	(1)-502	公表	7681-57-4

**Impurities and/or Additives :** Not applicable

### 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

**Special extinguishing method**

No information available

**Specific hazards arising from the chemical product**

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

**Protection of 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 strong oxidizing agents. 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

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

#### Storage

##### Safe storage conditions

**Storage conditions** Keep container protect from light itightly closed in well ventilated cool place under 25°C

**Safe packaging material** Polyethylene

##### Incompatible substances

Strong oxidizing agents, 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 hand- and eye-wash facility. And display their position clearly.

### Exposure limits

Chemical Name	JSOH (Japan)	ISHL (Japan)	ACGIH
Sodium Hydrogen Sulfite 7631-90-5	N/A	N/A	TWA: 5 mg/m <sup>3</sup>
Sodium Disulfite 7681-57-4	N/A	N/A	TWA: 5 mg/m <sup>3</sup>

### Personal protective equipment

**Respiratory protection** Dust mask

**Hand protection** Protection gloves

**Eye protection** protective eyeglasses or chemical safety goggles

**Skin and body protection** Long-sleeved work clothes

### General hygiene considerations

Handle in accordance with good industrial hygiene and safety practice.

## Section 9: PHYSICAL AND CHEMICAL PROPERTIES

<b>Form</b>	
<b>Color</b>	White - nearly white
<b>Appearance</b>	crystalline powder - powder
<b>Odor</b>	Sulfur dioxide odor
<b>pH</b>	acidic (aq.)
<b>Melting point/freezing point</b>	No data available
<b>Boiling point, initial boiling point and boiling range</b>	No data available
<b>Flash point</b>	No data available
<b>Evaporation rate:</b>	No data available
<b>Flammability (solid, gas):</b>	No data available
<b>Upper/lower flammability or explosive limits</b>	
<b>Upper :</b>	No data available
<b>Lower :</b>	No data available
<b>Vapour pressure</b>	No data available
<b>Vapour density</b>	No data available
<b>Specific Gravity / Relative density</b>	1.48
<b>Solubilities</b>	water : freely soluble . Ethanol : practically insoluble, or insoluble .
<b>n-Octanol/water partition coefficient:(log Pow)</b>	No data available
<b>Auto-ignition temperature:</b>	No data available
<b>Decomposition temperature:</b>	No data available
<b>Viscosity (coefficient of viscosity)</b>	No data available
<b>Dynamic viscosity</b>	No data available

## Section 10: STABILITY AND REACTIVITY

### Stability

<b>Stability</b>	May be altered by light.
<b>Reactivity</b>	No data available

### Hazardous reactions

has a strong reducing action. reacts with strong acids, to generate harmful sulfur dioxide gas.

### Conditions to avoid

Extremes of temperature and direct sunlight

### Incompatible materials

Strong oxidizing agents, Strong acids

### Hazardous decomposition products

Sulfurous acid gas, Sulfur oxides (SO<sub>x</sub>)

## Section 11: TOXICOLOGICAL INFORMATION

### Acute toxicity

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Sodium Hydrogen Sulfite	1,400-2,000 mg/kg ( Rat )	N/A	N/A
Sodium Disulfite	1540 mg/kg ( Rat )	> 2000 mg/kg ( Rat ) > 2 g/kg ( Rat )	N/A

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

**Serious eye damage/ irritation**

Chemical Name	Serious eye damage source information
Sodium Hydrogen Sulfite	Based on the NITE GHS classification results.
Sodium Disulfite	

**Respiratory or skin sensitization**

Chemical Name	Respiratory, Skin sensitization source information
Sodium Hydrogen Sulfite	Based on the NITE GHS classification results.
Sodium Disulfite	

**Reproductive cell mutagenicity**

Chemical Name	Mutagenic source information
Sodium Hydrogen Sulfite	Based on the NITE GHS classification results
Sodium Disulfite	

**Carcinogenicity**

Chemical Name	Carcinogenicity source information
Sodium Hydrogen Sulfite	Based on the NITE GHS classification results
Sodium Disulfite	

Chemical Name	NTP	IARC	ACGIH	JSOH (Japan)
Sodium Hydrogen Sulfite 7631-90-5	-	Group 3	-	-
Sodium Disulfite 7681-57-4	-	Group 3	-	-

**Reproductive toxicity**

Chemical Name	Reproductive toxicity source information
Sodium Hydrogen Sulfite	Based on the NITE GHS classification results
Sodium Disulfite	

**STOT-single exposure**

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

**STOT-repeated exposure**

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

**Aspiration hazard**

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

## Section 12: ECOLOGICAL INFORMATION

**Ecotoxicity**

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Sodium Hydrogen Sulfite	N/A	LC50: <i>Gambusia affinis</i> 240 mg/L 96 h	EC50: <i>Daphnia magna</i> 119 mg/L 48 h
Sodium Disulfite	EC50 : <i>Scenedesmus subspicatus</i> 48.1 mg/L 72 h	LC50: <i>Lepomis macrochirus</i> 32 mg/L 96 h	EC50: <i>Daphnia magna</i> 88.76 mg/L 48 h

**Other data**

Chemical Name	Aquatic toxicity -Acute- source information	Aquatic toxicity -Chronic- source information
Sodium Hydrogen Sulfite	Based on the NITE GHS classification results	Based on the NITE GHS classification results
Sodium Disulfite		

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

### 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

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

### Section 15: REGULATORY INFORMATION

#### International Inventories

<b>EINECS/ELINCS</b>	-
<b>TSCA</b>	-

#### 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>	Harmful Substances Whose Names Are to be Indicated on the Label (Law Art.57, Para.1, Enforcement Order Art.18) Notifiable Substances (Law Art.57-2, Enforcement Order Art.18-2 Attached Table No.9)No.26,412
<b>Regulations for the carriage and storage of dangerous goods in ship</b>	Not applicable
<b>Civil Aeronautics Law</b>	Not applicable

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**Pollutant Release and Transfer Register Law** Not applicable

**Export Trade Control Order** Not 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 Organic Chemistry , SSOCJ, Koudansha Scientific Co.Ltd.  
Chemical Dictionary, Kyouritsu Publishing Co., Ltd.  
etc

**Disclaimer**

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 Z7252(2014). \*JIS: Japanese Industrial Standards

**End of Safety Data Sheet**