

Safety Data Sheet

1. Identification of the substance/mixture and of the company/undertaking

Product identifier:

Product name: Sodium Bisulfite

Product code(SDS NO): 12581jis_E-1

Details of the supplier of the safety data sheet

Manufacturer/Supplier: JUNSEI CHEMICAL CO., LTD.

Address: 1-6, Ohmano-Cho, Koshigaya, Saitama 343-0844, Japan

Division: Quality Assurance Department

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2. Hazards identification

GHS classification and label elements of the product

Classification of the substance or mixture

HEALTH HAZARDS

Acute toxicity Oral: Category 4

Respiratory sensitization: Category 1

Skin sensitization: Category 1

Specific target organ toxicity – single exposure: Respiratory tract irritation Category 3

Specific target organ toxicity – repeated exposure: Category 1(respiratory system)

(Note) GHS classification without description: Not applicable/Out of classification/Not classifiable

Label elements



Signal word: Danger

HAZARD STATEMENT

Harmful if swallowed

May cause allergy or asthma symptoms or breathing difficulties if inhaled

May cause an allergic skin reaction

May cause respiratory irritation

Causes damage to organs through prolonged or repeated exposure

PRECAUTIONARY STATEMENT

Prevention

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

In case of inadequate ventilation wear respiratory protection. (as specified by the manufacturer/supplier or the competent authority.)

Use only outdoors or in a well-ventilated area.

Wash contaminated parts thoroughly after handling.

Wear protective gloves.

Contaminated work clothing should not be allowed out of the workplace.

Do not eat, drink or smoke when using this product.

Response

Get medical advice/attention if you feel unwell.

If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

Sodium Bisulfite, JUNSEI CHEMICAL CO., LTD., 12581jis_E-1, 18/10/2017

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

IF ON SKIN: Wash with plenty of soap and water.

If skin irritation or rash occurs: Get medical advice/attention.

Take off contaminated clothing and wash it before reuse.

IF SWALLOWED: Rinse mouth. Call a POISON CENTER or doctor/physician if you feel unwell.

Storage

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

Store locked up.

Disposal

Dispose of contents/container in accordance with local/national regulation.

3. Composition/information on ingredients

Mixture/Substance selection:

Mixture

Common name, synonyms: Sodium Hydrogen Sulfite

Ingredient name: Sodium hydrogensulfite

Chemical formula: HNaO_3S

Chemicals No, Japan: 1-502

CAS No.: 7631-90-5

MW: 104.05

ECNO: 231-548-0

Ingredient name: Sodium metabisulfite

Chemical formula: $\text{Na}_2\text{O}_5\text{S}_2$

Chemicals No, Japan: 1-502

CAS No.: 7681-57-4

MW: 190.09

ECNO: 231-673-0

This product's content(%) : (as SO_2) 64.0~67.4 <

4. First-aid measures

Descriptions of first-aid measures

General measures

Get medical attention/advice if you feel unwell.

IF INHALED

Remove person to fresh air and keep comfortable for breathing.

If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

Call a POISON CENTER or doctor/physician if you feel unwell.

IF ON SKIN (or hair)

Take off immediately all contaminated clothing. Rinse skin with water/shower.

Wash with plenty of soap and water.

If skin irritation or rash occurs: Get medical advice/attention.

IF IN EYES

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If eye irritation persists: Get medical advice/attention.

IF SWALLOWED

Rinse mouth.

Call a POISON CENTER or doctor/physician if you feel unwell.

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media

- Use appropriate extinguishing media suitable for surrounding facilities.
- The product is non-flammable.

Specific hazards arising from the substance or mixture

- Containers may explode when heated.
- Fire may produce irritating, corrosive and/or toxic gases.
- Runoff from fire control or dilution water may cause pollution.

Advice for firefighters

Specific fire-fighting measures

- Evacuate non-essential personnel to safe area.

Special protective equipment and precautions for fire-fighters

- Wear fire/ flame resistant/retardant clothing.
- Wear protective gloves/protective clothing/eye protection/face protection.
- Firefighters should wear self-contained breathing apparatus with full face piece operated positive pressure mode.

6. Accidental release measures

Personnel precautions, protective equipment and emergency procedures

- Keep unauthorized personnel away.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Ventilate area after material pick up is complete.
- Wear proper protective equipment.
- PUBLIC SAFETY: Ventilate closed spaces before entering.

Environmental precautions

- Avoid release to the rivers, lakes, ocean and groundwater.

Methods and materials for containment and cleaning up

- Sweep up, place in a bag and hold for waste disposal.
- Do NOT absorb in saw-dust or other combustible absorbents.

Preventive measures for secondary accident

- Collect spillage.
- Stop leak if you can do it without risk.
- Prevent entry into waterways, sewers, basements or confined areas.

7. Handling and storage

Precautions for safe handling

Preventive measures

(Exposure Control for handling personnel)

- Do not breathe dust/fume/gas/mist/vapors/spray.

(Protective measures against fire & explosion)

- Keep away from heat/sparks/open flames/hot surfaces. – No smoking.

Exhaust/ventilator

- Exhaust/ventilator should be available.

Safety treatments

- Avoid contact with skin.
- Avoid contact with eyes.
- Avoid breathing dust, fume, gas, mist or vapor.

Safety Measures/Incompatibility

- Use only outdoors or in a well-ventilated area.

Wear protective gloves, protective clothing or face protection.

Wear protective gloves.

Use personal protective equipment as required.

When using do not eat, drink or smoke.

Conditions for safe storage, including any incompatibilities

Recommendation for storage

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

Keep cool. Protect from sunlight.

Store locked up.

8. Exposure controls/personal protection

Control parameters

No control value data available

Adopted value

(Sodium hydrogensulfite)

No Adopted value data available

ACGIH(1992) TWA: 5mg/m³ (Skin, eye & URT irr)

(Sodium metabisulfite)

No Adopted value data available

ACGIH(1992) TWA: 5mg/m³ (URT irr)

Exposure controls

Appropriate engineering controls

Do not use in areas without adequate ventilation.

Eye wash station should be available.

Washing facilities should be available.

Individual protection measures

Respiratory protection

Wear respiratory protection.

Hand protection

Wear protective gloves. Recommended material(s): impermeable or chemical resistant rubber

Consult with your glove and/or personnel equipment manufacturer for selection of appropriate compatible materials.

Eye protection

Wear chemical safety goggle.

Wear eye/face protection.

Safety and Health measures

Wash ... thoroughly after handling.

Do not eat, drink or smoke when using this product.

Contaminated work clothing should not be allowed out of the workplace.

Take off contaminated clothing and wash it before reuse.

9. Physical and Chemical Properties

Information on basic physical and chemical properties

Physical properties

Appearance: Granules or powder

Color: White

Odor: Sulfur dioxide odor

pH: Acidic [aqueous solution(1→20)]

Phase change temperature

Initial Boiling Point/Boiling point data N.A.

Melting point/Freezing point data N.A.

Decomposition temperature data N.A.

Flash point data N.A.

Auto-ignition temperature data N.A.

Explosive properties data N.A.

Vapor pressure data N.A.

Vapor density data N.A.

Specific gravity/Density data N.A.

Solubility

Solubility in water: Freely soluble.

Solubility in solvent: Practically insoluble in ethanol (95) and in diethyl ether.

n-Octanol /water partition coefficient data N.A.

10. Stability and Reactivity

Chemical stability

Stable under normal storage/handling conditions.

This product is slowly affected by air or by light.

Conditions to avoid

Contact with incompatible materials.

Heat. Air. Light.

Incompatible materials

Bases, Strong oxidizing agents

Hazardous decomposition products

Sulfur oxides, Sodium oxides.

11. Toxicological Information

Information on toxicological effects

Acute toxicity

Acute toxicity (Oral)

[GHS Cat. Japan, base data]

(Sodium hydrogensulfite) rat LD50 =1310mg/kg (average)

(Sodium metabisulfite) rat LD50 =1540 mg/kg (EPA Pesticides, 2007)

Irritant properties

Serious eye damage /irritation

[GHS Cat. Japan, base data]

(Sodium metabisulfite)

rabbit : eye irritant (SIDS, 2001); EU CLP: Eye Dam. 1 H318

Sensitization

Respiratory sensitization

[GHS Cat. Japan, base data]

(Sodium hydrogensulfite) cat.1; expert judgment

Skin sensitization

[GHS Cat. Japan, base data]

(Sodium hydrogensulfite) cat.1; expert judgment

No Mutagenic effects data available

Carcinogenicity

(Sodium hydrogensulfite)

ACGIH-A4(1992) : Not Classifiable as a Human Carcinogen

(Sodium metabisulfite)

ACGIH-A4(1992) : Not Classifiable as a Human Carcinogen

No reproductive toxicity data available

Delayed and immediate effects and also chronic effects from short- and long-term exposure

STOT

STOT-single exposure

[cat.3(resp. irrit.)]

[Japan published data]

(Sodium hydrogensulfite) Respiratory tract irritation

(Sodium metabisulfite) Respiratory tract irritation (HSDB, Access on September 2013)

STOT-repeated exposure

[cat.1]

[Japan published data]

(Sodium hydrogensulfite) respiratory system (ACGIH 7th, 2001)

No Aspiration hazard data available

Additional data

There are no data available on the preparation itself.

12. Ecological Information

Toxicity

Aquatic toxicity

Aquatic acute toxicity component(s) data

[GHS Cat. Japan, base data]

(Sodium metabisulfite) Algae (*Scenedesmus subspicatus*) EC50=48.1mg/L/72hr (SIDS, 2004)

Water solubility

(Sodium metabisulfite) 54 g/100 ml (ICSC, 2002)

No Persistence and degradability data available

Bioaccumulative potential

(Sodium metabisulfite) log Pow=-3.7 (ICSC, 2002)

Additional information

There are no data available on the preparation itself.

13. Disposal considerations

Waste treatment methods

Dispose of contents/container in accordance with local/national regulation.

14. Transport Information

UN No, UN CLASS

UN number: 2693

UN proper shipping name: BISULPHITES, AQUEOUS SOLUTION, N.O.S.

Transport hazard class(es): 8

Packing group: III

ERG GUIDE NO.: 154

15. Regulatory Information

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

US major regulations

TSCA

Sodium hydrogensulfite; Sodium metabisulfite

Other regulatory information

We are not able to check up the regulatory information in regard to the substances in your country or region, therefore, we request this matter would be filled by your responsibility.

Regulatory information with regard to this substance in your country or in your region should be examined by your own responsibility.

Ensure this material in compliance with federal requirements and ensure conformity to local regulations.

16. Other information**GHS classification and labelling**

Acute Tox. 4: H302 Harmful if swallowed

Resp. Sens. 1: H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled

Skin Sens. 1: H317 May cause an allergic skin reaction

STOT SE 3: H335 May cause respiratory irritation

STOT RE 1: H372 Causes damage to organs through prolonged or repeated exposure

Reference Book

Globally Harmonized System of classification and labelling of chemicals, (5th ed., 2013), UN

Recommendations on the TRANSPORT OF DANGEROUS GOODS 19th edit., 2015 UN

Classification, labelling and packaging of substances and mixtures (table 3-1 ECNO 6182012)

2012 EMERGENCY RESPONSE GUIDEBOOK (US DOT)

2017 TLVs and BEIs. (ACGIH)

<http://monographs.iarc.fr/ENG/Classification/index.php>

Supplier's data/information

NITE Chemical Risk Information Platform (NITE-CHRIP) <http://www.safe.nite.go.jp/japan/db.html>

GHS Classification Guidance for Enterprises 2013 Revised Edition (August, 2013, METI)

General Disclaimer

This information contained in this data sheet represents the best information currently available to us. However, no warranty is made with respect to its completeness and we assume no liability resulting from its use. It is advised to make their own tests to determine the safety and suitability of each such product or combination for their own purposes.

The data given here is based on current knowledge and experience. The purpose of this Safety Data Sheet is to describe the products in terms of their safety requirements. The data does not signify any warranty with regard to the products' properties.

The GHS classification data given here is based on current Japan official data (NITE published in 2015).