

Safety Data Sheet

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

Product identifier:

Product name: Sodium Nitrite

Product code (SDS NO): 10287jis_E-1

Relevant identified uses of the substance or mixture and uses advised against

Uses advised against: This product conform to JSFA (Japan's Specifications and Standards for Food Additives).

Do not use for other purposes.

Details of the supplier of the safety data sheet

Manufacturer/Supplier: JUNSEI CHEMICAL CO., LTD.

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

Division: Quality Assurance Department

Telephone number: +81-48-986-6161

FAX: +81-48-989-2787

e-mail address: shiyaku-t@junsei.co.jp

2. Hazards identification

GHS classification and label elements of the product

Classification of the substance or mixture

PHYSICAL AND CHEMICAL HAZARDS

Oxidizing solids: Category 3

HEALTH HAZARDS

Acute toxicity (Oral): Category 3

Serious eye damage/eye irritation: Category 2A

Germ cell mutagenicity: Category 2

Reproductive toxicity: Category 2

Reproductive toxicity – effects on or via lactation: Additional category

Specific target organ toxicity – single exposure: Category 1(blood)

Specific target organ toxicity – repeated exposure: Category 2(blood)

ENVIRONMENT HAZARDS

Hazardous to the aquatic environment (Acute): Category 1

Hazardous to the aquatic environment (Long-term): Category 1

(Note) GHS classification without description: Not classified/Classification not possible

Label elements



Signal word: Danger

HAZARD STATEMENT

H272–May intensify fire; oxidizer

H301–Toxic if swallowed

H319–Causes serious eye irritation

H341–Suspected of causing genetic defects

H361–Suspected of damaging fertility or the unborn child

H362–May cause harm to breast-fed children

H370–Causes damage to organs after single exposure

H373–May cause damage to organs through prolonged or repeated exposure

H400–Very toxic to aquatic life

H410-Very toxic to aquatic life with long lasting effects

PRECAUTIONARY STATEMENT

Prevention

- Obtain special instructions before use.
- Do not handle until all safety precautions have been read and understood.
- Avoid contact during pregnancy/while nursing.
- Avoid release to the environment.
- Keep away from heat/sparks/open flames/hot surfaces. – No smoking.
- Keep/Store away from clothing/combustible materials.
- Do not breathe dust/fume/gas/mist/vapors/spray.
- Wash contaminated parts thoroughly after handling.
- Wear protective gloves/protective clothing/eye protection/face protection.
- Use personal protective equipment as required.
- Do not eat, drink or smoke when using this product.

Response

- In case of fire: Use appropriate media for extinction.
- Collect spillage.
- Get medical advice/attention if you feel unwell.
- IF exposed or concerned: Get medical advice/attention.
- IF exposed or concerned: Call a POISON CENTER or doctor/physician.
- 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. Immediately call a POISON CENTER or doctor/physician.

Storage

- Store locked up.

Disposal

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

Specific Physical and Chemical hazards

- Oxidizing material. Organic or combustible material may catch fire in contact with it.

3. Composition/information on ingredients

Mixture/Substance selection:

Substance

Ingredient name:Sodium nitrite
Content (%):97.0 <
Chemical formula:NaNO2
Chemicals No, Japan:1-483
CAS No.:7632-00-0
MW:69.00
ECNO:231-555-9

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.
- 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.
- 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. Induce vomiting (ONLY IN CONSCIOUS PERSONS!)

Immediately give the person one or two glasses of water, to dilute the chemical.

Immediately call a POISON CENTER or doctor/physician.

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

Most important symptoms and effects, both acute and delayed

(Symptoms when inhalation or ingestion)

Confusion. Convulsions. Dizziness. Headache. Nausea. Unconsciousness. Increased heart rate.

Blue lips, fingernails and skin.

(Symptoms when skin and/or eye contact)

Redness of the eyes. Pain of the eyes.

5. Fire-fighting measures**Extinguishing media****Suitable extinguishing media**

In case of fire, use water in large amounts to extinguish.

Not combustible but enhances combustion of other substances.

Unsuitable extinguishing media

Form, Dry powder, CO2

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 until material pick up is complete.

Wear proper protective equipment.

PUBLIC SAFETY: Ventilate closed spaces before entering.

Environmental precautions

Avoid release to headsprings, rivers, lakes, ocean and groundwater.

Runoff may create fire or explosion hazard.

Methods and materials for containment and cleaning up

With clean shovel place material into clean, dry container and cover loosely; move containers from spill area.

If appropriate, moisten first to prevent dusting. Carefully collect remainder.

Preventive measures for secondary accident

- Collect spillage.
- Stop leak if you can do it without risk.
- Keep combustibles (wood, paper, oil, etc.) away from spilled material.

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 and explosion)

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

Keep/Store away from clothing/combustible materials.

(Exhaust/ventilator)

Exhaust/ventilator should be available.

(Safety treatments)

Avoid contact with skin.

Avoid contact with eyes.

Safety Measures

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Wear protective gloves/protective clothing/eye protection/face protection.

Use personal protective equipment as required.

When using do not eat, drink or smoke.

May ignite combustibles (wood, paper, oil, clothing, etc.).

Contaminated clothing may be a fire risk when dry.

Any incompatibilities

Strong acids, Reducing agents, Aluminium, Ammonium compounds, Amines, Combustible substances should not be mixed with the chemicals.

Advice on general occupational hygiene

Avoid contact during pregnancy/while nursing.

Wash contaminated parts thoroughly after handling.

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

Storage

Conditions for safe storage

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

Keep cool. Protect from sunlight.

Store locked up.

Container and packaging materials for safe handling data is not available.

8. Exposure controls/personal protection

Control parameters

Control value in MHLW is not available.

Adopted value

Adopted value in JSOH is not available.

Adopted value in ACGIH is not available.

OSHA-PEL value is not available.

NIOSH-REL value is not available.

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.

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

Eye protection

Wear safety glasses with side-shields.

Wear eye/face protection.

Skin and body protection

Wear impervious clothing and boots in case of repeated or prolonged treatment.

9. Physical and Chemical Properties

Information on basic physical and chemical properties

Physical state: Crystalline powder, granules or rod-shaped lumps

Color: White~ Light yellow

Odor: None

Odor threshold data is not available.

pH: Basic (aqueous solution)

Boiling point or initial boiling point: > 320°C

Boiling range data is not available.

Evaporation rate data is not available.

Melting point/Freezing point: 271°C

Decomposition temperature: > 320°C

Self-Accelerating Decomposition Temperature/SADT data is not available.

Flammability (gases, liquids and solids) data is not available.

Flash point data is not available.

Auto-ignition temperature data is not available.

Critical temperature data is not available.

Lower and upper explosion limit/flammability limit data is not available.

Vapor pressure data is not available.

Vapor density data is not available.

VOC data is not available.

Relative vapor density (Air=1) data is not available.

Relative density of the Vapor/air - mixture at 20°C (Air = 1) data is not available.

Density and/or relative density: 2.2g/cm³

Dynamic viscosity data is not available.

Kinematic viscosity data is not available.

Solubility:

Solubility in water: 82 g/100 ml (20°C)

Solubility in solvent: Slightly soluble in ethanol.

n-Octanol/water partition coefficient: log Pow-3.7

No Particle characteristics data is not available.

10. Stability and Reactivity

Reactivity

Runaway polymerization will not occur.

Chemical stability

Stable under normal storage/handling conditions.

Possibility of hazardous reactions

May explode on heating above 530°C.

Decomposes on contact with acids. This produces toxic fumes .

The substance is a strong oxidant. It reacts with combustible and reducing materials. This generates fire and explosion hazard.

The solution in water is a weak base.

Reacts with aluminium, ammonium compounds and amines.

Conditions to avoid

Contact with incompatible materials.

Heat.

Incompatible materials

Strong acids, Reducing agents, Aluminium, Ammonium compounds, Amines, Combustible substances

Hazardous decomposition products

Nitrogen oxides, Sodium oxides

11. Toxicological Information

Information on toxicological effects

Acute toxicity

Acute toxicity (Oral)

[GHS Cat. Japan, base data]

rat LD50=77~150mg/kg (SIDS, 2005)

Irritant properties

Skin corrosion/irritation

[GHS Cat. Japan, base data]

rabbit : not irritating (SIDS, 2005)

Skin corrosion/irritation data is not available.

Serious eye damage/irritation

[GHS Cat. Japan, base data]

rabbit : moderate irritation (SIDS, 2005)

Allergenic and sensitizing effects data is not available.

Germ cell mutagenicity

[GHS Cat. Japan, base data]

cat. 2; IARC 94, 2010

Carcinogenic effects data is not available.

Reproductive toxicity

[GHS Cat. Japan, base data]

cat. 2; SIDS, 2005

cat. add; SIDS, 2005

STOT

STOT-single exposure

[cat.1]

[GHS Cat. Japan, base data]

blood (SIDS, 2005)

STOT-repeated exposure

[cat.2]

[GHS Cat. Japan, base data]

blood (NTP TR 495, 2001)

Aspiration hazard data is not available.

12. Ecological Information

Ecotoxicity

Aquatic toxicity

H400-Very toxic to aquatic life

H410-Very toxic to aquatic life with long lasting effects

Hazardous to the aquatic environment (Acute)

[GHS Cat. Japan, base data]

Fish (rainbow trout) LC50=0.54mg/L/96hr (SIDS, 2006)

Water solubility

82 g/100 ml (20°C) (ICSC, 2000)

Persistence and degradability

Persistence and degradability data is not available.

Bioaccumulative potential

log Pow=-3.7 (ICSC, 2000)

Mobility in soil

Mobility in soil data is not available.

Other adverse effects

Ozone depleting chemical data is not available.

13. Disposal considerations

Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging

Waste treatment methods

Avoid release to the environment (- if this is not the intended use).

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

14. Transport Information

UN No., UN CLASS

UN No.: 1500

Proper Shipping Name : SODIUM NITRITE

Class or division : 5.1

Subsidiary hazard(s) : 6.1

Packing group : III

ERG GUIDE No.: 140

IMDG Code (International Maritime Dangerous Goods Regulations)

UN No.: 1500

Proper Shipping Name : SODIUM NITRITE

Class or division : 5.1

Subsidiary hazard(s) : 6.1

Packing group : III

IATA Dangerous Goods Regulations

UN No.: 1500

Proper Shipping Name : SODIUM NITRITE

Class or division : 5.1

Subsidiary hazard(s) : 6.1

Hazard labels : Oxidizer & Toxic

Packing group : III

Environmental hazards

MARPOL Annex III – Prevention of pollution by harmful substances

Marine pollutants (yes/no) : yes

15. Regulatory Information

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

Environmental hazards

MARPOL Annex V – Prevention of pollution by garbage discharge

Hazardous to the aquatic environment – acute hazard: cat.1

Sodium nitrite

Hazardous to the aquatic environment – long-term hazard: cat.1, 2

Sodium nitrite

Transport in bulk according to Annex II of MARPOL73/78 and IBC Code

Noxious Liquid ; Cat. Y

Sodium nitrite

US Federal Regulations

Chemicals listed in TSCA Inventory

Sodium nitrite

Superfund Amendments and Reauthorizations Act (SARA), Title III

SARA 313 (TRI) Reporting Year 2020

Sodium nitrite

Other regulatory information

We are not able to check up the regulatory information with 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.

Regulatory information in this section are limited to intentional ingredient(s), but does not contain information on non-intentional ingredients or impurities which are not informed by supplier(s).

16. Other information

GHS classification and labelling

H272–Ox. Sol. 3: H272 May intensify fire; oxidizer

H301–Acute Tox. 3: H301 Toxic if swallowed

H319–Eye Irrit. 2A: H319 Causes serious eye irritation

H341–Muta. 2: H341 Suspected of causing genetic defects

H361–Repr. 2: H361 Suspected of damaging fertility or the unborn child

H362–Lact.: H362 May cause harm to breast-fed children

H370–STOT SE 1: H370 Causes damage to organs after single exposure

H373–STOT RE 2: H373 May cause damage to organs through prolonged or repeated exposure

H400–Aquatic Acute 1: H400 Very toxic to aquatic life

H410–Aquatic Chronic 1: H410 Very toxic to aquatic life with long lasting effects

Reference Book

Globally Harmonized System of classification and labelling of chemicals, (6th ed., 2015), UN

Recommendations on the TRANSPORT OF DANGEROUS GOODS 20th edit., 2017 UN

IMDG Code, 2018 Edition (Incorporating Amendment 39–18)

IATA Dangerous Goods Regulations (61th Edition) 2020

Classification, labelling and packaging of substances and mixtures (Table 3 ECNO6182012)

2016 EMERGENCY RESPONSE GUIDEBOOK (US DOT)

2019 TLVs and BEIs. (ACGIH)

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

JIS Z 7253 : 2019

JIS Z 7252 : 2019

Sodium Nitrite ,JUNSEI CHEMICAL CO., LTD.,10287jis_E-1,08/04/2020

2019 Recommendation on TLVs (JSOH)

Supplier's data/information

Chemicals safety data management system "GHS Assistant" (<https://www.asahi-ghs.com/>)

NITE Chemical Risk Information Platform (NITE-CHRIP)

https://www.nite.go.jp/en/chem/chrip/chrip_search/systemTop

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

General Disclaimer

This data sheet was created based on the information we currently have and may be revised according to new information. In addition, the precautions apply only to normal handling, and in the case of special handling, please make adequate countermeasure to maintain your safety.

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 2018).