

## Safety Data Sheet

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

**Product identifier:**

Product name: Sodium Nitrate

Reference number(SDS):37516jis\_E-1

**Product type:**

Food Additives

※This product conform to JSFA(Japan's Specifications and Standards for Food Additives).

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

Relevant identified uses of the product: Fermentation preparation agent, Color fixatives

Uses advised against: 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

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### Section 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**

Serious eye damage/eye irritation: Category 2B

Germ cell mutagenicity: Category 2

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

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

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

**Label elements**

Signal word: Danger

**HAZARD STATEMENT**

H272–May intensify fire; oxidizer

H320–Causes eye irritation

H341–Suspected of causing genetic defects

H370–Causes damage to organs

H372–Causes damage to organs through prolonged or repeated exposure

**PRECAUTIONARY STATEMENT****Prevention**

Obtain special instructions before use.

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

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Keep away from clothing and other 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 to extinguish.
- Get medical advice/attention if you feel unwell.
- IF exposed or concerned: Get medical advice/attention.
- IF exposed or concerned: Call a POISON CENTER/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.

**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.

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**Section 3. Composition/information on ingredients****Mixture/Substance selection:****Substance**

- Ingredient name: Sodium nitrate
- Content (%): 99.0 <
- Chemical formula:  $\text{NaNO}_3$
- Chemicals No, Japan: 1-484
- CAS No.: 7631-99-4
- MW: 84.99
- ECNO: 231-554-3

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**Section 4. First-aid measures****Descriptions of first-aid measures****General measures**

- Get medical advice/attention if you feel unwell.
- Keep victim warm and quiet.
- Call emergency medical service.

**IF INHALED**

- Remove person to fresh air and keep comfortable for breathing.
- Give artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- Call a POISON CENTER/doctor/physician if you feel unwell.

**IF ON SKIN (or hair)**

- Take off immediately all contaminated clothing. Rinse skin with water or shower.
- If skin irritation or rash occurs: Get medical advice/attention.
- Remove and isolate contaminated clothing and shoes.

**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/doctor/physician if you feel unwell.

Most important symptoms and effects, both acute and delayed

(Symptoms when inhalation or ingestion)

Cough. Sore throat. Abdominal pain. Blue lips, fingernails and skin. Convulsions. Diarrhoea. Dizziness. Headache. Laboured breathing. Confusion. Nausea. Unconsciousness.

(Symptoms when skin and/or eye contact)

Conjunctival redness of the eyes. Redness of the skin. Pain of the eyes.

Indication of any immediate medical attention and special treatment needed

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

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## Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media

Use appropriate extinguishing media suitable for surrounding facilities.

Not combustible but enhances combustion of other substances.

Unsuitable extinguishing media

Unsuitable extinguishing media data is not available.

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 resistant or flame retardant clothing.

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

Firefighters should wear self-contained breathing apparatus with a full facepiece operated in the positive pressure mode.

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## Section 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.

Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.

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

Sweep up, place in a bag and hold for waste disposal.

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

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.

Do not get water inside containers.

Keep out of low areas.

## Section 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, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Keep away from clothing and other 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.

#### Any incompatibilities

Reducing agents, Combustible substances should not be mixed with the chemicals.

#### Advice on general occupational hygiene

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 in accordance with local/national regulation.

Store locked up.

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

#### Specific end use(s)

See information in Section 7.1 and 7.2 for handling and storage recommendations. See

Section 8 for exposure controls and personal protection recommendations.

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## Section 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.

### 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.

Inspect before use and replace worn or damaged gloves.

Contact the glove manufacturer for specific advice on glove selection and breakthrough times for your use conditions.

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.

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## Section 9. Physical and Chemical Properties

### Information on basic physical and chemical properties

Physical state: Crystals or crystalline powder

Color: Colorless or white

Odor: None

Odor threshold data is not available.

Melting point/Freezing point: 308°C

Boiling point or initial boiling point data is not available.

Boiling range data is not available.

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

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

Flash point data is not available.

Auto-ignition temperature data is not available.

Decomposition temperature: 380°C

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

pH: 5.0~8.0 (50g/L, 20°C)

Dynamic viscosity data is not available.

Kinematic viscosity data is not available.

Solubility:

Solubility in water: 730g/liter(0°C)

Solubility in solvent: Slightly soluble in ethanol (99.5).

n-Octanol/water partition coefficient data is not available.

Vapor pressure data is not available.

Vapor density data is not available.

Density and/or relative density: 2.3

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.

Particle characteristics data is not available.

### Other information

Critical temperature data is not available.

Evaporation rate data is not available.

VOC data is not available.

Other information is not available.

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## Section 10. Stability and Reactivity

### Reactivity

Runaway polymerization will not occur.

### Chemical stability

Stable under normal storage/handling conditions.

Hygroscopic.

### Possibility of hazardous reactions

Decomposes on heating. This increases fire hazard.

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

## Conditions to avoid

Contact with incompatible materials.

Heating.

## Incompatible materials

Strong reducing agents, Combustible substances

## Hazardous decomposition products

Nitrogen oxides, Oxygen gas, Sodium oxides.

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**Section 11. Toxicological Information**

## Information on toxicological effects

## Acute toxicity

## Acute toxicity (Oral)

## [Product]

Based on available data, the classification criteria are not met.

## [Data for components of the product]

[GHS Cat. Japan, base data]

rat LD50=3700mg/kg (EPA RED, 1991)

## Acute toxicity (Dermal)

## [Product]

Classification not possible (Insufficient data available or no data available).

## [Data for components of the product]

No data available.

## Acute toxicity (Inhalation)

## [Product]

Classification not possible (Insufficient data available or no data available).

## [Data for components of the product]

No data available.

## Irritant properties

## Skin corrosion/irritation

## [Product]

Based on available data, the classification criteria are not met.

## [Data for components of the product]

[GHS Cat. Japan, base data]

mild or light irritation (EPA RED, 1991)

## Serious eye damage/irritation

## [Product]

Category 2B, Causes eye irritation

## [Data for components of the product]

[GHS Cat. Japan, base data]

corneal opacity recover within 72hours (EPA RED, 1991)

## Sensitization

## Respiratory sensitization

## [Product]

Classification not possible (Insufficient data available or no data available).

## [Data for components of the product]

No data available.

## Skin sensitization

## [Product]

Classification not possible (Insufficient data available or no data available).

## [Data for components of the product]

No data available.

## Germ cell mutagenicity

[Product]

Category 2, Suspected of causing genetic defects

[Data for components of the product]

[GHS Cat. Japan, base data]

cat. 2; RTECS, 2005

## Carcinogenicity

[Product]

Classification not possible (Insufficient data available or no data available).

[Data for components of the product]

No data available.

## Reproductive toxicity

[Product]

Classification not possible (Insufficient data available or no data available).

[Data for components of the product]

No data available.

## Specific target organ toxicity (STOT)

## STOT-single exposure

[Product]

Category 1, Causes damage to organs

[Data for components of the product]

[cat.1]

[GHS Cat. Japan, base data]

blood (ECETOC TR 27, 1988)

## STOT-repeated exposure

[Product]

Category 1, Causes damage to organs through prolonged or repeated exposure

[Data for components of the product]

[cat.1]

[GHS Cat. Japan, base data]

blood (ECETOC TR 27, 1988)

## Aspiration hazard

[Product]

Classification not possible (Insufficient data available or no data available).

[Data for components of the product]

No data available.

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**Section 12. Ecological Information**

## Toxicity

## Aquatic toxicity

[Product]

Based on available data, the classification criteria are not met.

[Data for components of the product]

Hazardous to the aquatic environment, short-term (acute)

[GHS Cat. Japan, base data]

Fish (rainbow trout) LC50=1685mg/L/96hr (SIDS, 2008)

## Water solubility

[Data for components of the product]

730 g/L(0°C) (PHYSPROP\_DB, 2009)

## Persistence and degradability

Persistence and degradability data is not available.

## Bioaccumulative potential

Bioaccumulative potential data is not available.

## Mobility in soil

Mobility in soil data is not available.

## Other adverse effects

Ozone depleting chemical data is not available.

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**Section 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

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

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**Section 14. Transport Information**

## UN No., UN CLASS

UN Number or ID Number : 1498

UN Proper Shipping Name : SODIUM NITRATE

Class or division (Transport hazard class) : 5.1

Packing group : III

ERG GUIDE No.: 140

## IMDG Code (International Maritime Dangerous Goods Regulations)

UN Number or ID Number : 1498

UN Proper Shipping Name : SODIUM NITRATE

Class or division (Transport hazard class) : 5.1

Packing group : III

## IATA (Dangerous Goods Regulations)

UN Number or ID Number : 1498

UN Proper Shipping Name : SODIUM NITRATE

Class or division (Transport hazard class) : 5.1

Hazard labels : Oxidizer

Packing group : III

## Environmental hazards

Marine pollutants (yes/no) : no

## Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable to Transport in bulk according to Annex II of MARPOL and the IBC Code

## MARPOL Annex V – HME (Harmful to the Marine Environment)

Specific target organ toxicity – repeated exposure: cat.1

Sodium nitrate

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**Section 15. Regulatory Information**

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

## U.S. Toxic Substances Control Act (TSCA) Inventory

Chemicals listed in TSCA Inventory

7631-99-4

All components are listed or exempted.

## Superfund Amendments and Reauthorizations Act (SARA), Title III

SARA 313 (TRI)

Sodium nitrate

## 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).

#### Chemical safety assessment

Advice on safe handling for this product can be found in sections 7 and 8 of this SDS.

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## Section 16. Other information

### GHS classification and labelling

H272–Oxidising Solids, Category 3: H272 May intensify fire; oxidiser

H320–Serious eye damage/eye irritation, Category 2B: H320 Causes eye irritation

H341–Germ cell mutagenicity, Category 2: H341 Suspected of causing genetic defects

H370–STOT – single exposure, Category 1: H370 Causes damage to organs

H372–STOT – Repeated exposure, Category 1: H372 Causes damage to organs through prolonged or repeated exposure

### References and sources for data

Globally Harmonized System of classification and labelling of chemicals, UN

Recommendations on the TRANSPORT OF DANGEROUS GOODS 22nd edit., 2021 UN

IMDG Code, 2020 Edition (Incorporating Amendment 40–20)

IATA Dangerous Goods Regulations (64th Edition) 2023

2020 EMERGENCY RESPONSE GUIDEBOOK (US DOT)

2022 TLVs and BEIs. (ACGIH)

JIS Z 7252 : 2019

JIS Z 7253 : 2019

2022 Recommendation on TLVs (JSOH)

Notification No. 0111–1 (January 11, 2022), Chemical Hazards Control Division, Industrial

Safety and Health Department, Labour Standards Bureau, MHLW in Japan

Supplier's data/information

Chemicals safety data management system "GHS Assistant" Version 4.22 (<https://www.asahi-ghs.com/>)

NITE Chemical Risk Information Platform "NITE-CHRIP"

([https://www.nite.go.jp/en/chem/chrip/chrip\\_search/systemTop](https://www.nite.go.jp/en/chem/chrip/chrip_search/systemTop))

GHS Classification Guidance for Enterprises 2019 Revised Edition (Ver. 2.0) (Mar. 2020, METI)

### Abbreviations and acronyms

SDS (Safety Data Sheet)

LD50 (Lethal Dose, 50%)

LC50 (Lethal Concentration, 50%)

IARC (International Agency for Research on Cancer)

ACGIH (American Conference of Governmental Industrial Hygienists)

EPA (US Environmental Protection Agency)

NTP (US National Toxicology Program)

JSOH (Japan Society for Occupational Health)

EU (European Union)

EC50 (Effective Concentration, 50%)

NOEC (No Observed Effect Concentration)

BOD (Biochemical Oxygen Demand)

COD (Chemical Oxygen Demand)

BCF (Bioconcentration Factor)

anh (anhydride)

### 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 2021).