

Safety Data Sheet

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

Product identifier:

Product name: Sodium dithionite

Product code(SDS NO): 58025jis_E-2

Details of the supplier of the safety data sheet

Manufacturer/Supplier: JUNSEI CHEMICAL CO., LTD.

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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

Physical and chemical hazards

Self-heating substances and mixtures: Category 1

HEALTH HAZARDS

Skin corrosion/irritation: Category 2

Serious eye damage/eye irritation: Category 2

ENVIRONMENT HAZARDS

Hazardous to the aquatic environment – acute hazard: Category 3

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

Label elements



Signal word: Danger

HAZARD STATEMENT

Self-heating; may catch fire

Causes skin irritation

Causes serious eye irritation

Harmful to aquatic life

PRECAUTIONARY STATEMENT

Prevention

Avoid release to the environment.

Keep cool. Protect from sunlight.

Wash contaminated parts thoroughly after handling.

Wear protective gloves.

Wear protective gloves/eye protection/face protection.

Wear eye protection/face protection.

Response

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

If skin irritation occurs: Get medical advice/attention.

Take off contaminated clothing and wash it before reuse.

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

Maintain air gap between stacks/pallets.

Store bulk masses greater than ...kg/...lbs at temperatures not exceeding ... °C.

Store away from other materials.

Disposal

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

Physical and Chemical hazards

Self-heating material. May catch fire spontaneously.

3. Composition/information on ingredients

Mixture/Substance selection:

Substance

Common name, synonyms: Sodium hydrosulfite

Ingredient name: Sodium dithionite

Content(%): 85.0 <

Chemical formula: Na2O4S2

Chemicals No, Japan: 1-504

CAS No.: 7775-14-6

MW: 174.11

ECNO: 231-890-0

4. First-aid measures

Descriptions of first-aid measures

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.

Wash with plenty of soap and water.

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

If skin irritation 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. Do NOT induce vomiting.

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)

Cough. Sore throat. Nausea. Abdominal pain. Vomiting. Diarrhoea.

(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 dry powder, CO₂, dry sand, water in large amounts..

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.
May re-ignite after fire is extinguished.

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.

Environmental precautions

Avoid release to the 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.

※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.

ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).

7. Handling and storage

Precautions for safe handling

Preventive measures

(Protective measures against fire and 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

Wear protective gloves, protective clothing or face protection.

Wear protective gloves and face protection.

Wear eye protection/face protection.

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.

Maintain air gap between stacks/pallets.

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Store bulk masses greater than ...kg/...lbs at temperatures not exceeding ... °C/... ° F

Storage temperature upper limit: 10°C

Storage temperature lower limit: 2°C

Incompatible storage condition

Store away from other materials.

8. Exposure controls/personal protection

Control parameters

No control value data available in MHLW

Adopted value

No Adopted value data available in JSOH

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.

Safety and Health measures

Wash ... thoroughly after handling.

Take off contaminated clothing and wash it before reuse.

9. Physical and Chemical Properties

Information on basic physical and chemical properties

Physical properties

Appearance: Crystals or crystalline powder

Color: White~Grayish-white

Odor: Slight characteristic odor

pH: ca. 7~9 (50g/L, 20°C)

Phase change temperature

Initial Boiling Point/Boiling point data N.A.

Melting point/Freezing point data N.A.

Decomposition temperature: >100°C

Flash point: (o.c.) about 100°C

Auto-ignition temperature: about 190°C

Explosive properties data N.A.

Vapor pressure data N.A.

Vapor density data N.A.

Specific gravity/Density: 2.4g/cm³

Solubility

Solubility in water: 25 g/100ml(20°C)

Solubility in solvent: Slightly soluble in alcohol.

n-Octanol /water partition coefficient: log Pow<-4.7

10. Stability and Reactivity

Reactivity

Runaway polymerization will not occur.

React with water.

Chemical stability

Stable under normal storage/handling conditions.

Possibility of hazardous reactions

The substance is a strong reducing agent. It reacts with oxidants.

Decomposes on contact with acids. This produces toxic gases.

Contact with water, moisture and moist air may cause spontaneous ignition.

Conditions to avoid

Contact with incompatible materials.

Open flames. Heat. Water. Moisture.

Incompatible materials

Acids, Oxidizing agents, Water.

Hazardous decomposition products

Sulfur oxides, Sodium oxides.

11. Toxicological Information

Information on toxicological effects

Acute toxicity

Acute toxicity (Oral)

[GHS Cat. Japan, base data]

rat LD50 = 2500 mg/kg (IUCILID, 2000)

Irritant properties

Skin corrosion/irritation

[GHS Cat. Japan, base data]

human : severe (HSFS, 2000)

Serious eye damage /irritation

[GHS Cat. Japan, base data]

rabbit : irritating (IUCILID, 2000)

No Allergenic and sensitizing effects data available

Germ cell mutagenicity

Reverse-mutation assay in bacteria (Ames test) : Negative

(MHLW_Mutagenicity Test Results for Chemical Substances)

No Carcinogenic effects data available

No reproductive toxicity data available

No STOT-single/repeated exposure data available

No Aspiration hazard data available

12. Ecological Information

Ecotoxicity

Aquatic toxicity

Harmful to aquatic life

Aquatic acute toxicity component(s) data

[GHS Cat. Japan, base data]

Fish (Leuciscus idus melanotus) LC50=46-68mg/L/96hr (IUCILID, 2000)

Water solubility

25 g/100 ml (20°C) (ICSC, 2008)

No Persistence and degradability data available

Bioaccumulative potential

log Pow < -4.7 (ICSC, 2008)

13. Disposal considerations**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 number: 1384

UN proper shipping name: SODIUM DITHIONITE (SODIUM HYDROSULPHITE)

Transport hazard class(es): 4.2

Packing group: II

ERG GUIDE NO.: 135

15. Regulatory Information

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

US major regulations

TSCA

Sodium dithionite

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

Self-heat. 1: H251 Self-heating; may catch fire

Skin Irrit. 2: H315 Causes skin irritation

Eye Irrit. 2: H319 Causes serious eye irritation

Aquatic Acute 3: H402 Harmful to aquatic life

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 (table3-1 ECNO6182012) 2016 EMERGENCY RESPONSE GUIDEBOOK (US DOT)

2018 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 (Aug. 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

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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 2016).