

Section 1. Chemical identification

Name: Sodium disulfate(IV)

Section 2. Composition/information on ingredients

CAS #:7681-57-4

EINECS No: 231-673-0

MF: Na₂S₂O₅

Synonyms

Sodium disulphate(IV); sodium metabisulfite; sodium metabisulphate; disodium disulfite; disodium metabisulfite; disodium pyrosulfite; sodium pyrosulfite; disodium sulfite.

Section 3. Hazards identification

Label precautionary statements

- Harmful.
- Harmful by inhalation, in contact with skin and if swallowed.
- Causes severe irritation.
- Possible sensitiser.
- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- Contact with acids liberates toxic gas.
- Irritating to eyes respiratory system and skin
- Keep away from oxidising agents.
- Wear suitable protective clothing.
- Air and moisture sensitive.



Harmful

Section 4. First aid measures

In case of eye contact, immediately flush eyes with copious amounts of water for at least 15 minutes. Assure adequate flushing of the eyes by separating the eyelids with fingers, and seek medical advice.

In case of skin contact, immediately flush skin with copious amounts of water for at least 15 minutes while removing contaminated clothing and shoes.

If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult give oxygen.

If swallowed, wash out mouth with water provided person is conscious. Call a physician. Do not induce vomiting.

Wash contaminated clothing before reuse.

Section 5. Fire fighting measures

Extinguishing media

- Dry chemical powder or appropriate foam.

Special fire fighting procedures

- Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

Unusual fire and explosions hazards

- Emits toxic fumes under fire conditions.
- When heated to decomposition it emits toxic fumes of SO_x and Na₂O.

Section 6. Accidental release measures

- Wear respirator, chemical safety goggles, rubber boots and heavy rubber gloves.
- Sweep up, place in a bag and hold for waste disposal.
- Avoid raising dust.
- Ventilate area and wash spill site after material pickup is complete.

Section 7. Handling and storage

Store in **GREY** area.

Refer to section 8.

Additional information

Mixing with sodium nitrite results in a vigorous exothermic reaction.

Section 8. Exposure controls/personal protection

- Wear approved respirator EN149 in non-ventilated areas or for exposure above the OEL, chemical-resistant gloves, safety goggles, other protective clothing.
- Safety shower and eye bath.
- Use only in a chemical fume cupboard.
- Avoid breathing dust.
- Do not get in eyes, on skin, on clothing.
- Avoid prolonged or repeated exposure.
- Wash thoroughly after handling.
- Toxic.
- Severe irritant.
- Possible sensitiser.
- Keep tightly closed.

- Air and moisture sensitive
- Store in a cool dry place.



Goggles



Gloves



Respirator



**Protective
clothing**



**Wash
hands**

Section 9. Physical and chemical properties

Appearance and odour

Colorless crystals or white to yellowish crystals/powder; odour of sulfur dioxide.

Physical properties

Melting point: >330°C

Specific gravity: 1.480

Section 10. Stability and reactivity

Stability

Stable.

Incompatibilities

- Strong acids.
- Strong oxidizing agents,
- Moisture sensitive.

Hazardous combustion or decomposition products

Sulfur oxides.

Section 11. Toxicological information

Acute effects

- Harmful if swallowed, inhaled or absorbed through the skin.
- Causes severe irritation.
- High concentrations are extremely destructive to tissues of the mucous membranes and upper respiratory tract, eyes and skin.
- Symptoms of exposure may include burning sensation, coughing, wheezing, laryngitis, shortness of breath, headache, nausea and vomiting.
- Prolonged or repeated exposure may cause allergic reactions in certain sensitive individuals.

Exposure can cause:

- Coughing, chest pains, difficulty in breathing.
- Stomach pains, vomiting diarrhoea.

Additional information

Certain individuals with pre-existing respiratory conditions such as asthma may experience hypersensitivity to sulfites and sulfur dioxide. The symptoms include bronchoconstriction, bronchospasm, gastrointestinal disturbance, flushing, hypotension, tingling sensation, urticaria/angioedema and shock.

Toxicity data

orl-rat LD₅₀:500 mg/kg

Section 12. Ecological information

- Data not yet available.

Section 13. Disposal considerations

- For small quantities, cautiously add to a large stirred excess of water, Adjust the pH to neutral, separate any insoluble solids or liquids and package them for hazardous-waste disposal. Flush the aqueous solution down the drain with plenty of water. The hydrolysis and neutralisation reactions may generate heat and fumes which can be controlled by the rate of addition.
- Observe all EU, Irish and local environmental regulations.

Section 14. Transport information

- Contact chemical supplier for transportation information.

Section 15. Regulatory information

European information

Harmful

- R 20/21/22** Harmful by inhalation, in contact with skin and if swallowed.
- R 31** Contact with acids liberates toxic gas.
- R 36/37/38** Irritating to eyes respiratory system and skin
- S 14** Keep away from oxidising agents.
- S 26** In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.



Harmful

- S36** Wear suitable protective clothing.
- OEL**-United Kingdom: TWA 5 mg/m³ Jan 93.

Section 16. Other information

This MSDS has been prepared in DkIT and is designed for Irish Second Level School Science Laboratories use only where quantities handled are less than 500g. The above information is believed to be correct but does not claim to be all inclusive and shall be used only as a guide. Every effort has been made to ensure that this information provided conforms with the latest available data. DkIT, the Department of Education & Science, Limerick Education Centre, Sigma, Aldrich, Fluka, Dr. Dunlevy or Ms. F. Dunlevy shall not be held liable for any information errors in this MSDS or for any damage resulting from handling or from contact with the above product.

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REFERENCES

Sigma Aldrich Fluka MSDS CD-ROM
Sax CD-ROM
MSDS on Internet