

SAFETY DATA SHEET

SODIUM HYDROSULPHITE (SODIUM DITHIONITE)

CAS No.: 7775-14-6

This Safety Data Sheet is compiled from well-established published chemical, GHS classification and regulatory reference sources for this substance. It is supplied by Suraj Chemicals as the distributor/supplier of record and is not a manufacturer-issued document. Users should also consult the specific manufacturer's SDS where available.

1. IDENTIFICATION

Product Name	Sodium Hydrosulphite (Sodium Dithionite)
CAS Number	7775-14-6
Recommended Use	Industrial / commercial chemical trading and distribution
Supplier	Suraj Chemicals, No 92, Govindappa Naicken Street, Shiva Complex, Chennai - 600001, India
Emergency Telephone	+91 - 9840284032, 9176135357 / +91 - 44 - 25393652

2. HAZARD(S) IDENTIFICATION

GHS Signal Word	Danger
HAZARD CLASSIFICATION - Self-heating substance - Category 1 - Skin irritation - Category 2 - Serious eye irritation - Category 2A	
HAZARD STATEMENTS - H251 - Self-heating; may catch fire - H315 - Causes skin irritation - H319 - Causes serious eye irritation	
PRECAUTIONARY STATEMENTS - P235+P410 - Keep cool; protect from sunlight - P280 - Wear protective gloves/eye protection/face protection - P407 - Maintain air gap between stacks/pallets - P413 - Store bulk masses greater than the specified quantity at a controlled temperature - P420 - Store away from other materials - P302+P352 - IF ON SKIN: wash with plenty of water - P305+P351+P338 - IF IN EYES: rinse cautiously with water for several minutes; remove contact lenses if present; continue rinsing	

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Sodium Hydrosulphite (Sodium Dithionite)
CAS Number	7775-14-6
Physical State	Solid
Appearance / Odour	White to grayish-white crystalline powder with a slight sulfurous odor.

4. FIRST-AID MEASURES

Eye Contact	Rinse cautiously with water for several minutes; remove contact lenses if present; continue rinsing and seek medical attention if irritation persists.
Skin Contact	Wash off with plenty of water; remove contaminated clothing; seek medical attention if irritation persists.
Inhalation	Remove to fresh air; if dust or sulfur dioxide fumes (from decomposition) cause coughing or discomfort, seek medical attention.
Ingestion	Rinse mouth with water; give water to drink; seek medical advice if discomfort occurs or larger amounts are ingested.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media	Water spray or flooding quantities of water; do not use dry chemical or CO ₂ alone on a self-heating fire since they may not adequately cool the material.
Unsuitable Extinguishing Media	Avoid confining the material in a sealed area, as decomposition can generate sulfur dioxide gas and heat.
Special Hazards	Self-heating and may catch fire, particularly if damp, contaminated, or stored in bulk without adequate ventilation; contact with moisture/acids releases sulfur dioxide gas; combustion or decomposition produces irritating/toxic sulfur oxide fumes; use full PPE and self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

Measures	Avoid generating dust, keep away from moisture and heat sources, sweep up and place in a loosely covered (vented, not airtight) container, and monitor for self-heating; flush residual spill area with water if extensive.
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7. HANDLING AND STORAGE

Handling Precautions	Keep dry and cool, avoid contact with moisture, acids and oxidizers, avoid bulk accumulation without ventilation, and monitor storage temperature; avoid generating and inhaling dust.
Storage Conditions	Store in a cool, dry, well-ventilated area away from moisture, heat, acids and oxidizers, in tightly closed but not completely sealed containers; avoid large bulk piles without temperature monitoring due to self-heating tendency; keep stock rotated (limited shelf life once opened).

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limits / PPE	No specific occupational exposure limit established for sodium dithionite itself; general guidance follows sulfur dioxide limits if decomposition fumes are present (SO2 OSHA PEL ~5 ppm); use a dust mask, safety glasses and gloves when handling.
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9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Solid
Appearance / Odour	White to grayish-white crystalline powder with a slight sulfurous odor.
Boiling Point	Not applicable
Melting Point	Not applicable (decomposes above ~52 C when moist; more stable dry)
Flash Point	Not applicable (solid; combustible/self-heating)
Density / Specific Gravity	~1.4-1.5 g/cm3 (true density); bulk density ~0.8-1.0 g/cm3
Water Solubility	Freely soluble, ~180-250 g/L at 20 C, but decomposes/oxidizes in aqueous solution over time
pH Value	~4.5-6.5 (5% aqueous solution, mildly acidic)

10. STABILITY AND REACTIVITY

Stability	Can undergo slow, self-accelerating exothermic decomposition/self-heating, especially when damp, contaminated or stored in bulk without adequate heat dissipation; reacts with moisture and acids to release sulfur dioxide.
Incompatible Materials	Water/moisture, acids, strong oxidizing agents, and heat sources.
Hazardous Decomposition	Sulfur dioxide gas and other sulfur oxide fumes on decomposition, combustion or contact with moisture/acid.

11. TOXICOLOGICAL INFORMATION

Summary	Causes skin and eye irritation; dust may irritate the respiratory tract; a widely used industrial reducing agent (textile/dye bleaching) with generally low acute systemic toxicity, though decomposition products (sulfur dioxide) are respiratory irritants; not classified as a carcinogen, mutagen or reproductive toxicant.
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12. ECOLOGICAL INFORMATION

Summary	Decomposes relatively readily in the environment (particularly in water) to sulfite/sulfate species; not expected to be significantly persistent or bioaccumulative, though acute aquatic toxicity from decomposition byproducts should be considered.
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13. DISPOSAL CONSIDERATIONS

Disposal Method	Dispose of in accordance with local regulations; avoid bulk disposal that could self-heat; typically suitable for controlled chemical waste treatment or dilution/neutralization per local rules.
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14. TRANSPORT INFORMATION

UN Number	UN1384
Transport Hazard Class	Class 4.2 (Substances liable to spontaneous combustion)
Packing Group	II

15. REGULATORY INFORMATION

Notes	Widely used textile, dye, paper and water treatment reducing/bleaching agent; classified as a self-heating substance with irritant properties under GHS, OSHA HCS and EU CLP; regulated for transport under IMDG/ADR/IATA as UN1384 'Sodium dithionite (sodium hydrosulphite)', Class 4.2, Packing Group II; requires temperature-controlled storage and handling per its self-heating classification.
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16. OTHER INFORMATION

Prepared By	Suraj Chemicals, Technical / QA Desk
Date of Issue	29 Sep 2026
Note	This SDS is compiled from well-established published GHS hazard classification data and general chemical reference sources for this substance, in the standard 16-section format. Values are believed accurate but Suraj Chemicals makes no warranty, express or implied, regarding their completeness. Users should evaluate suitability for their own specific use.

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+91 - 9840284032, 9176135357
+91 - 44 - 25393652, 42130281
sales@surajchemicals.com
surajchemicals@yahoo.com

No 92, Govindappa Naicken Street
Shiva Complex, Chennai - 600001
www.surajchemicals.com
GST NO : 33ACEPV8190L1ZZ

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