



NEWAY SINOPHC TECH. LIMITED

ADD:RM. 204, BUILDING 3, NO. 188, AONA RD., CHINA (SHANGHAI) PILOT FREE TRADE ZONE.
Email:marketing01@newayphc.com; Phone:+86-021-50350029 <https://www.newayphc.com>

Safety Data Sheet (MSDS)

(According to GB/T 16483 and GB/T 17519; Adapts to GHS, IMDG, IATA Standards)

Sodium Sulfit

SECTION 1: Identification

1.1 Product Identifiers - Product Name: Sodium Sulfit - Product Number: SDS-Na₂SO₃-CAS7757837-202802 - Brand: SIGALD - CAS-No.: 7757-83-7 - Synonyms: Sodium sulfit anhydrous; Sulfurous acid disodium salt - Chemical Family: Inorganic Sulfit Compound

1.2 Details of the supplier of the safety data sheet

- Company : NEWAY SINOPHC TECH. LIMITED
- RM. 204, BUILDING 3, NO. 188, AONA RD., CHINA (SHANGHAI)PILOT FREE TRADE ZONE.
- Telephone : +86-021-50350029
- Fax : +86-021-50350029

1.3 Emergency telephone

Emergency Phone # : +86-021-50350029
(CHEMTREC)

1.4 Uses & Restrictions - Identified Uses: Water treatment (dechlorination, oxygen scavenger); textile bleaching and dyeing auxiliary; food preservative and antioxidant; photographic developer; analytical reagent; pulp and paper bleaching agent. - Uses Advised Against: Direct contact with strong oxidants; use in acidic environments without protection; mixing with concentrated acids; use in high-temperature open systems (releases sulfur dioxide).

SECTION 2: Hazards Identification

2.1 GHS Classification: Skin irritation (Category 3); Eye irritation (Category 2A); Aquatic hazard (Category 2); Specific target organ toxicity (single exposure, respiratory tract, Category 3)

2.2 GHS Label Elements - Hazard Pictogram: (Irritant) + (Aquatic hazard) - Signal Word: WARNING - Hazard Statements: H316 (Causes mild skin irritation); H319 (Causes serious eye irritation); H411 (Toxic to aquatic life with long-lasting effects); H335 (May cause respiratory irritation) - Precautionary Statements: P261, P264, P271, P273, P280, P302+P352, P305+P351+P338, P337+P313, P391, P501

2.3 Physical/Chemical Hazards: Non-combustible solid; decomposes at >500°C to sodium oxide and sulfur dioxide; reacts violently with strong oxidants (e.g., potassium permanganate, hydrogen peroxide) leading to combustion risk; reacts with concentrated acids to release toxic sulfur dioxide gas; no explosion hazard under normal conditions.

2.4 Health Hazards: Mild skin irritation (dryness, redness, itching); severe eye irritation (redness, tearing, corneal damage); inhalation of dust or sulfur dioxide (from decomposition/acid reaction) causes respiratory tract irritation (coughing, sore throat, shortness of breath); ingestion in large amounts causes gastrointestinal upset (nausea, vomiting, diarrhea); low acute toxicity but cumulative irritation.

2.5 Environmental Hazards: Highly toxic to aquatic organisms (fish, algae, invertebrates); persistent in water bodies; high bioaccumulation potential (BCF: 500-1000 in fish); long-lasting damage to aquatic ecosystems; may contaminate soil and groundwater, affecting plant growth.

SECTION 3: Composition/Information on Ingredients



NEWAY SINOPHC TECH. LIMITED

ADD:RM. 204, BUILDING 3, NO. 188, AONA RD., CHINA (SHANGHAI) PILOT FREE TRADE ZONE.
Email:marketing01@newayphc.com; Phone:+86-021-50350029 <https://www.newayphc.com>

Substance/Mixture: Substance (main component $\geq 97.0\%$)

Component	Content (w/w)	CAS-No.	Hazard Classification
Sodium Sulfit	$\geq 97.0\%$	7757-83-7	Skin Irrit. 3; Eye Irrit. 2A; Aquatic Toxicity 2; STOT-SE 3
Sodium Carbonate (Impurity)	$\leq 2.0\%$	497-19-8	Non-hazardous
Water Insoluble Impurities	$\leq 0.05\%$	-	Non-hazardous

SECTION 4: First Aid Measures

- Inhaled: Remove to fresh air immediately; keep the affected person in a semi-upright position; if breathing is difficult, give oxygen; seek medical attention if cough, chest tightness or shortness of breath persists. - Skin Contact: Remove contaminated clothing and shoes; rinse skin thoroughly with plenty of running water for at least 15 minutes; wash with mild soap if necessary; seek medical help if redness, itching or burns occur. - Eye Contact: Hold eyelids open; rinse eyes continuously with clean water or normal saline for at least 20 minutes (flush from inner to outer corner); do not rub eyes; avoid using eye drops without medical advice; seek emergency medical help immediately. - Swallowed: Do not induce vomiting (may cause esophageal irritation); rinse mouth with water (do not swallow); give 200-300 mL of water to dilute (only if conscious and able to swallow); seek medical attention immediately, even if no obvious discomfort.

SECTION 5: Firefighting Measures

- Suitable Extinguishing Media: Water spray, foam, CO₂, dry powder, sand. - Unsuitable Media: Do not use water jet directly (may cause splashing of molten substances at high temperature). - Special Hazards: Non-combustible, but decomposes at $>500^{\circ}\text{C}$ to release toxic sulfur dioxide gas; reacts with strong oxidants to cause combustion; sulfur dioxide is a corrosive and irritating gas. - Firefighter Advice: Wear full-body firefighting protective equipment (including acid-resistant respiratory mask); cool containers with water spray from a safe distance; avoid inhalation of smoke and decomposition products; ensure good ventilation at the fire scene.

SECTION 6: Accidental Release Measures

- Personal Precautions: Wear dust mask (P2 grade), chemical-resistant gloves (nitrile or neoprene), safety goggles and protective clothing; avoid inhalation of dust and skin/eye contact. - Environmental Precautions: Immediately block the leakage area; prevent dust or spilled material from entering sewers, rivers, lakes or groundwater; use absorbent materials (sand, vermiculite) to isolate the leakage from water bodies; notify local environmental authorities for large-scale leakage. - Cleanup: Small spill - collect with a clean shovel or vacuum cleaner (equipped with dust filter), seal in a corrosion-resistant container for disposal; large spill - dike the area, collect all materials into sealed drums, and entrust professional institutions for harmless treatment; clean the area with water (collect rinse water for treatment), do not discharge directly.



NEWAY SINOPHC TECH. LIMITED

ADD:RM. 204, BUILDING 3, NO. 188, AONA RD., CHINA (SHANGHAI) PILOT FREE TRADE ZONE.
Email:marketing01@newayphc.com; Phone:+86-021-50350029 <https://www.newayphc.com>

SECTION 7: Handling and Storage

- Handling: Operate in a well-ventilated, dry and dust-free workshop; avoid creating dust clouds; use mechanical ventilation if necessary; wear personal protective equipment; do not mix with strong oxidants, concentrated acids or food-grade materials; avoid splashing and spillage; wash hands and face thoroughly after operation. - Storage: Store in a cool, dry, well-ventilated warehouse (temperature 5-30°C, relative humidity ≤60%); keep container tightly closed to prevent moisture absorption and oxidation (easily oxidized to sodium sulfate in air); avoid direct sunlight and high temperature (>40°C); store separately from strong oxidants (KMnO₄, H₂O₂), concentrated acids (HCl, H₂SO₄) and food additives; stack containers stably (no more than 3 layers) to prevent tipping; label clearly with hazard warnings. - Shelf Life: 24 months (unopened, specified conditions); use promptly after opening, seal tightly after each use; do not use if caking, discoloration (yellowing) or moisture absorption occurs. - Compatibility: Incompatible with strong oxidants, concentrated acids, heavy metal salts and halogenated compounds.

SECTION 8: Exposure Controls/Personal Protection

- Engineering Controls: Install local exhaust ventilation and general ventilation systems; set up emergency eyewash stations and safety showers near the workplace; use dust-collecting equipment (bag filters) to control dust pollution. - PPE: Respiratory protection: P2 dust mask when dust is generated, acid-resistant respiratory mask when contacting acids; Hand protection: Nitrile or neoprene gloves (thickness ≥0.5 mm); Eye/Face protection: Safety goggles and face shield (when handling large quantities); Body protection: Dust-proof, corrosion-resistant protective clothing. - Hygiene Measures: Do not eat, drink or smoke in the workplace; do not touch eyes, face or mouth with contaminated hands; change contaminated clothing immediately; wash contaminated clothing separately; provide soap, water and skin care products near the workplace.

SECTION 9: Physical and Chemical Properties

Physical State: Solid (crystalline powder); Color: White; Odor: Odorless, faint sulfurous odor when decomposed pH (25°C, 1% Aqueous Solution): 8.5-10.5; Melting Point: Decomposes at >500°C; Boiling Point: Not applicable (decomposes) Flash Point: Non-flammable; Autoignition Temperature: Not applicable Density (25°C, solid): 2.633 g/cm³; Solubility: Soluble in water (28.3 g/100 mL at 25°C), slightly soluble in ethanol, insoluble in acetone and benzene Vapor Pressure (25°C): <0.001 hPa; Partition Coefficient (log P): -3.2 (estimated); Viscosity: Not applicable (solid); Hygroscopicity: Easily hygroscopic in humid air

SECTION 10: Stability and Reactivity

- Stability: Stable under normal storage and handling conditions (dry, cool, sealed); easily oxidized to sodium sulfate in air (especially humid air); decomposes in acidic environment to release sulfur dioxide; decomposes at high temperature (>500°C) to sodium oxide and sulfur dioxide. - Incompatibilities: Strong oxidants (may cause combustion/explosion); concentrated acids (release toxic sulfur dioxide); heavy metal salts (form insoluble sulfites); halogenated compounds (react violently). - Hazardous Decomposition Products: Sulfur dioxide (SO₂, toxic, irritating); sodium oxide (Na₂O, corrosive) at high temperature; sulfurous acid (H₂SO₃, corrosive) in acidic environment.

SECTION 11: Toxicological Information



NEWAY SINOPHC TECH. LIMITED

ADD:RM. 204, BUILDING 3, NO. 188, AONA RD., CHINA (SHANGHAI) PILOT FREE TRADE ZONE.
Email:marketing01@newayphc.com; Phone:+86-021-50350029 <https://www.newayphc.com>

- Acute Toxicity: Oral (Rat, LD₅₀): 3250 mg/kg; Dermal (Rabbit, LD₅₀): >2000 mg/kg; Inhalation (Rat, LC₅₀): >5 mg/m³ (4-hour exposure, dust). - Skin/Eye Irritation: Mild skin irritation (Category 3); severe eye irritation (Category 2A), may cause corneal edema and temporary vision impairment; no skin sensitization reported. - Respiratory Toxicity: Inhalation of dust or sulfur dioxide causes respiratory tract irritation (cough, sore throat, bronchospasm); long-term inhalation may damage respiratory mucosa. - Other Toxicity: No mutagenic, carcinogenic or teratogenic effects reported (OECD test guidelines); low chronic toxicity, no long-term organ damage in animal tests.

SECTION 12: Ecological Information

- Fish (Zebrafish, LC₅₀): 45-80 mg/L (96-hour exposure) - Daphnia (EC₅₀): 20-40 mg/L (48-hour exposure) - Algae (Growth Inhibition, EC₅₀): 30-60 mg/L (72-hour exposure) - Biodegradability: Moderately biodegradable (BOD₅/COD = 0.25-0.35); persists in water for 20-40 days. - Environmental Fate: Easily soluble in water; hydrolyzes slightly in acidic water to release sulfur dioxide; accumulates in aquatic organisms (BCF: 500-1000 in fish); leaches into groundwater if spilled on soil, affecting soil pH and plant growth.

SECTION 13: Disposal Considerations

- Product Waste: Collect waste in corrosion-resistant sealed containers; do not mix with other wastes (especially oxidants and acids); dispose of via licensed waste treatment institutions (neutralization + landfill or incineration); do not discharge into water bodies or sewers. - Packaging Waste: Rinse containers thoroughly with water (collect rinse water for treatment); dispose of as hazardous waste if contaminated, or general solid waste if clean; recycle packaging materials only after thorough cleaning and approval. - Special Disposal Notes: Neutralize with dilute acid (under ventilation, avoid sulfur dioxide release) before disposal; incineration must be equipped with sulfur dioxide absorption devices; comply with local environmental protection regulations.

SECTION 14: Transport Information

- UN Number: ADR/RID: 1853; IMDG: 1853; IATA-DGR: 1853 - UN Proper Shipping Name: SODIUM SULFITE - Transport Class: 8 (Corrosive); Packaging Group: III; Environmental Hazards: Yes (Marine Pollutant, Category 2) - Special Precautions: Transport in corrosion-resistant, sealed packaging (paper-plastic composite bags with PE liner or plastic drums); avoid collision, vibration and impact; keep away from oxidants, acids and food during transport; transport in covered vehicles (moisture-proof); prevent rain, moisture and direct sunlight; drivers and handlers must be trained and familiar with product hazards; carry emergency handling equipment.

SECTION 15: Regulatory Information

- National Regulations (China): Complies with Hazardous Chemical Safety Management Regulation (Hazard Class 8); meets GB/T 9853-2018 (Sodium Sulfite) and GB 2760 (Food Additive Standard); compliant with water treatment, textile and food industry standards. - International Regulations: GHS Rev.9 (Skin Irrit. 3, Eye Irrit. 2A, Aquatic Toxicity 2, STOT-SE 3); REACH (EU, registered); TSCA (US, listed); FDA (US, approved as food preservative).

SECTION 16: Other Information



NEWAY SINOPHC TECH. LIMITED

ADD:RM. 204, BUILDING 3, NO. 188, AONA RD., CHINA (SHANGHAI) PILOT FREE TRADE ZONE.
Email:marketing01@newayphc.com; Phone:+86-021-50350029 <https://www.newayphc.com>

- Revision Date: 20 FEB 2028 - Disclaimer: Based on current scientific knowledge and product testing data; supplier not liable for damage caused by improper use, storage, handling or non-compliance with regulations; the information in this MSDS is accurate to the best of our knowledge at the time of revision.

