



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 **Product Name:** Sulfadoxine **CAS-No.:** 2447-57-6 **Product Number:** SDX-20260228 **Brand:** SIGALD **Revision Date:** 28 FEB 2026

SECTION 1: Identification of the Substance/Mixture and of the Company/Undertaking

1.1 Product Identifiers

- Synonyms: 4-(4-Amino-6-methoxy-1,3,5-triazin-2-yl)benzenesulfonamide; Sulphadoxine

1.2 Supplier Details

- Company: NEWAY SINOPHC TECH. LIMITED
- Address: 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:** +86-021-50350029 (CHEMTREC)

1.4 Identified Uses & Uses Advised Against

- Identified Uses: Pharmaceutical raw material (antibacterial/antimalarial); synthesis of combination anti-infective drugs; biomedical research reagent.
- Uses Advised Against: Not for direct oral use (unformulated); no unapproved industrial/cosmetic/food use; avoid use in sulfonamide-allergic individuals.

SECTION 2: Hazards Identification

2.1 **GHS Classification:** Acute oral toxicity, Category 4 (H302); Skin irritation, Category 2 (H315); Eye irritation, Category 2 (H319); Skin sensitization, Category 1 (H317)

- Hazard Pictogram: (Warning)
- Signal Word: **Warning**
- Hazard Statements: H302 - Harmful if swallowed; H315 - Causes skin irritation; H319 - Causes serious eye irritation; H317 - May cause an allergic skin reaction
- Precautionary Statements: P261, P270, P280, P302+P352, P305+P351+P338, P333+P313

Physical and Chemical Hazards: No physical/chemical hazards; non-combustible

Health Hazards: Harmful if swallowed; causes skin/serious eye irritation; may trigger allergic skin reactions in sensitive individuals; sulfonamide allergy cross-reactivity risk.

Environmental Hazards: Slightly toxic to aquatic organisms; fully biodegradable in natural environment; avoid direct release to water bodies.

2.6 **Other Hazards:** No additional hazards identified.

SECTION 3: Composition/Information on Ingredients

- **Substance / Mixture:** Pure substance
- **Active Component:** Sulfadoxine (CAS:2447-57-6) | Concentration: ≥99.0% | Classification: Acute oral toxicity Cat.4; Skin/Eye irritation Cat.2; Skin sensitization Cat.1

SECTION 4: First Aid Measures

4.1 First-Aid Measures



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- Inhaled: Move to fresh air; rest in a comfortable breathing position; consult a doctor if coughing/chest discomfort occurs.
- Skin Contact: Rinse skin with running water and mild soap for 10-15 mins; remove contaminated clothing; consult a doctor if redness/itching/blistering persists.
- Eye Contact: Rinse eyes thoroughly with running water for 15-20 mins (hold eyelids open); remove contact lenses; **immediately consult a doctor.**
- Swallowed: Rinse mouth with water; **do not induce vomiting**; immediately call a poison control center or consult a doctor (note sulfonamide allergy risk).4.2 **Symptoms:** Nausea/vomiting (ingestion); skin redness/erythema/urticaria; eye burning/tearing/blurred vision; allergic rash in sensitized individuals.4.3 **Medical Attention:** Symptomatic treatment; no specific antidote; gastric lavage under medical supervision if large amount is ingested; antihistamines for allergic reactions.4.4 **Notes to Physician:** Inform of product composition and sulfonamide allergy status; monitor for allergic cross-reactivity.

SECTION 5: Firefighting Measures

5.1 **Extinguishing Media:** Water spray, foam, CO₂, dry powder (all suitable)5.2 **Special Hazards:** Non-combustible; decomposes at >200°C to release toxic nitrogen oxides, sulfur dioxide and ammonia fumes.5.3 **Firefighter Advice:** Wear self-contained breathing apparatus (SCBA) and full fire-fighting gear; avoid inhalation of decomposition fumes; keep containers cool with water spray to prevent decomposition.

SECTION 6: Accidental Release Measures

- 6.1 **Personal Precautions:** Wear N95 dust mask, chemical safety goggles, nitrile gloves and impermeable protective clothing; ensure good ventilation.6.2 **Environmental Precautions:** Prevent spillage from entering drains, sewers, rivers or other water bodies; contain spilled material to avoid soil contamination.6.3 **Clean Up Methods**
- Small Spill: Sweep up with a dry clean spatula; transfer to a sealed plastic container for disposal.
 - Large Spill: Contain with inert material (sand/vermiculite); collect into sealed drum; rinse the area with a small amount of water (collect rinse water for disposal).6.4 **Reference:** See Section 13 for disposal.

SECTION 7: Handling and Storage

7.1 Safe Handling

- Operate in a well-ventilated fume hood/area; avoid dust generation/inhalation.
- Do not eat/drink/smoke in the work area; wash hands thoroughly with soap and water after handling.
- Avoid contact with eyes, skin and mucous membranes; wear full PPE during handling; identify sulfonamide-allergic personnel before operation.7.2 **Safe Storage**
- Storage Conditions: Cool, dry, dark warehouse; ≤25°C, relative humidity ≤60%; airtight sealed container.



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- Incompatibilities: Strong acids, strong bases, oxidizing agents, heavy metal salts.
- Storage Class (TRGS 510): 10 (Toxic Solids, Non-combustible)
- Shelf Life: 36 months (unopened, under specified conditions)
- Storage Segregation: Store separately from food, feed, cosmetic raw materials and pharmaceutical APIs for sulfonamide-allergic use.

SECTION 8: Exposure Controls/Personal Protection

8.1 Control Parameters

- Occupational Exposure Limit (OEL): No official national limit; recommended TWA: 1.0 mg/m³ (inhalable dust)

8.2 Exposure Controls

- Engineering Controls: Local exhaust ventilation (LEV) for dust-generating operations; dust collection system.
- Personal Protective Equipment (PPE)
 - Eye/Face: Chemical safety goggles (mandatory)
 - Skin: Nitrile rubber gloves (≥0.18mm); impermeable protective clothing
 - Respiratory: N95/P95 dust mask for routine handling; powered air-purifying respirator (PAPR) for large-scale operations
 - Hand: Nitrile gloves (no latex/gloves with pinholes)
- Hygiene: Change contaminated clothing immediately; shower after handling; avoid touching eyes/face before hand washing.

SECTION 9: Physical and Chemical Properties

- Physical State: Crystalline powder
- Color: White to off-white
- Odor: Almost odorless
- Melting Point: 195-200°C
- Boiling Point: N/A (decomposes before boiling)
- Flammability: Non-combustible
- Flash Point: N/A
- Autoignition Temperature: >350°C
- Solubility: Sparingly soluble in acetone/ethanol; slightly soluble in water; soluble in dilute acids and alkalis
- Density (25°C): 1.48 g/cm³
- Particle Size: 100-200 mesh (pharmaceutical grade, customizable)
- Explosive Properties: Non-explosive
- Oxidizing Properties: None
- pH Value: 5.5-7.5 (1% aqueous suspension, 25°C)
- Viscosity: N/A (solid)

SECTION 10: Stability and Reactivity

10.1 **Chemical Stability:** Stable under recommended storage conditions ($\leq 25^{\circ}\text{C}$, dry, sealed). 10.2 **Hazardous Reactions:** No hazardous reactions under normal use/handling; reacts with strong acids/alkalis to form soluble salts. 10.3 **Conditions to Avoid:** High temperature ($>200^{\circ}\text{C}$), direct UV light, high humidity, contact with strong acids/bases/oxidizers. 10.4 **Incompatible Materials:** Concentrated HCl/H₂SO₄, sodium hydroxide, hydrogen peroxide, potassium permanganate. 10.5 **Decomposition Products:** Nitrogen oxides (NO_x), sulfur dioxide (SO₂), ammonia (NH₃), carbon monoxide (CO), aromatic compounds.

SECTION 11: Toxicological Information

11.1 Toxicological Effects

- Acute Toxicity: Oral (Rat, LD₅₀) = 3900 mg/kg; Dermal (Rabbit, LD₅₀) >5000 mg/kg; Inhalation (Rat, LC₅₀) >5 mg/m³ (4h)
- Skin Irritation: Moderate irritation (Rabbit, 4h exposure); redness/edema (reversible).
- Eye Irritation: Severe irritation (Rabbit, 24h exposure); corneal edema (reversible with treatment).
- Skin Sensitization: Positive (human/animal tests); may cause allergic contact dermatitis.
- Mutagenicity: No mutagenic effects (in vitro/in vivo tests).
- Carcinogenicity: Not classified by IARC/EPA/NTP.
- Reproductive Toxicity: No adverse reproductive effects at therapeutic dosages; avoid high-dose exposure during pregnancy/lactation.
- Target Organ Toxicity: Eyes, skin, gastrointestinal tract; hematological effects at chronic high exposure.

SECTION 12: Ecological Information

12.1 **Toxicity:** Fish (Zebrafish, LC₅₀) = 120 mg/L (96h); Daphnia (EC₅₀) = 90 mg/L (48h); Algae (EC₅₀) = 150 mg/L (72h) 12.2 **Persistence and Degradability:** Fully biodegradable (BOD₅/COD = 0.65) in aquatic environments; degradation half-life = 10-18 days. 12.3

Bioaccumulative Potential: Low (log Kow = 0.8); no biomagnification in aquatic food chains. 12.4 **Mobility in Soil:** Moderate mobility; soluble in soil water at neutral/alkaline pH; binds to soil organic matter. 12.5 **PBT/vPvB:** Not classified as PBT/vPvB. 12.6 **Other Effects:** Slightly toxic to aquatic invertebrates at high concentrations; no adverse effects on soil microorganisms.

SECTION 13: Disposal Considerations

13.1 **Waste Treatment:** Dispose via licensed hazardous chemical waste treatment facilities; incinerate at high temperature ($>800^{\circ}\text{C}$) with gas scrubbing to remove toxic fumes (SO₂/NO_x); **do not dispose of with ordinary waste.** 13.2 **Packaging Waste:** Rinse packaging with dilute water then neutralizer; dispose as hazardous plastic/metal waste; do not recycle with food/cosmetic packaging.

SECTION 14: Transport Information

14.1 **UN Number:** ADR/RID/IMDG/IATA: 2811 14.2 **UN Proper Shipping Name:** Toxic solids, organic, n.o.s. (Sulfadoxine) 14.3 **Transport Hazard Class:** 6.1 (Toxic substances) 14.4 **Packaging Group:**

14.5 **Environmental Hazards:** IMDG: Marine pollutant (No) 14.6 **Special Precautions:** Transport at $\leq 25^{\circ}\text{C}$; avoid direct sunlight, moisture, collision and breakage of containers; store separately from food/feed/strong acids/bases. 14.7 **Incompatible Materials:** Avoid transport with strong oxidizing agents, alkaline solutions and food/feed raw materials.

SECTION 15: Regulatory Information

15.1 National & International Regulations

- China: Chinese Pharmacopoeia (CP) compliant; Hazardous Chemical Safety Management Regulation (Class 6.1 toxic substance); Pharmaceutical Raw Material Management Regulation.
 - International: GHS (Rev.9) Cat.4 Acute oral toxicity; REACH (EU) - Registered; TSCA (US) - Listed on Inventory; USP/EP/BP compliant (pharmaceutical grade).
- 15.2 **Other:** Comply with local pharmaceutical import/export, hazardous chemical transport and environmental protection regulations; mark for sulfonamide allergy risk.

SECTION 16: Other Information

- This MSDS is based on current scientific research and complies with GB/T 16483, GB/T 17519 and GHS international standards.
- Supplier is not liable for damage caused by improper use, storage or non-compliance with safety precautions (especially use in sulfonamide-allergic individuals).
- Pharmaceutical grade Sulfadoxine meets CP/USP/EP quality standards; use only for formulated pharmaceutical anti-infective/antimalarial products.
- For further technical/safety information, contact the supplier's R&D/EHS department.