



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: Pyrimethamine **CAS-No.:** 58-14-0 **Product Number:** PYR-20260216 **Brand:**

SIGALD **Revision Date:** 16 FEB 2026

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

1.1 Product Identifiers

- Synonyms: 2,4-Diamino-5-(4-chlorophenyl)-6-ethylpyrimidine; Daraprim
- Company: NEWAY SINOPHC TECH. LIMITED
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- Telephone: +86-021-50350029
- Fax: +86-021-50350029

1.2 Supplier Details

- **Emergency telephone:** +86-021-50350029 (CHEMTREC)
- **Identified Uses & Uses Advised Against**
- Identified Uses: Pharmaceutical raw material (anti-malarial/anti-parasitic); biomedical research reagent; veterinary anti-parasitic drug synthesis
- Uses Advised Against: Not for direct oral/topical use (unformulated); no unapproved industrial use; not for food/additive use

SECTION 2: Hazards Identification

2.1 **GHS Classification:** Acute oral toxicity, Category 4 (H302); Eye irritation, Category 2 (H319); Specific target organ toxicity (single exposure), Category 3 (Gastrointestinal tract) (H341)

2.2 GHS Label Elements

- Hazard Pictogram: (Warning)
- Signal Word: **Warning**
- Hazard Statements: H302 - Harmful if swallowed; H319 - Causes serious eye irritation; H341 - Suspected of causing genetic defects
- Precautionary Statements: P264, P270, P280, P305+P351+P338, P312, P337+P313

2.3 Physical and Chemical Hazards:

No physical/chemical hazards; non-combustible
Harmful if swallowed; causes serious eye irritation; suspected genotoxicity; may cause gastrointestinal discomfort upon accidental ingestion

2.4 **Health Hazards:** Slightly toxic to aquatic organisms; biodegradable in natural environment (slow); avoid direct release to water bodies
2.5 **Environmental Hazards:** Slightly toxic to aquatic organisms; biodegradable in natural environment (slow); 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:** Pyrimethamine (CAS:58-14-0) | Concentration: ≥99.0% | Classification: Acute oral toxicity Cat.4; Eye irritation Cat.2

SECTION 4: First Aid Measures

4.1 First-Aid Measures

- Inhaled: Move to fresh air; rest in a position comfortable for breathing; consult a doctor if coughing/shortness of breath occurs



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- Skin Contact: Rinse skin with running water/mild soap for 5-10 mins; remove contaminated clothing; consult a doctor if irritation 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
- 4.2 **Symptoms:** Nausea/vomiting (ingestion); eye redness/burning/tearing; mild skin irritation in sensitive individuals
- 4.3 **Medical Attention:** Symptomatic treatment; no specific antidote; gastric lavage under medical supervision if large amount is ingested
- 4.4 **Notes to Physician:** Inform of product composition and exposure/ingestion amount; monitor gastrointestinal and neurological function

SECTION 5: Firefighting Measures

5.1 **Extinguishing Media:** Water spray, foam, CO₂, dry powder (all suitable)

5.2 **Special Hazards:** Non-combustible; decomposes at >250°C to release small amounts of toxic nitrogen oxides and hydrogen chloride 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

SECTION 6: Accidental Release Measures

- 6.1 **Personal Precautions:** Wear N95 dust mask, chemical safety goggles, nitrile gloves and 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; do not flush with water
- 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 after handling
 - Avoid contact with eyes, skin and mucous membranes; wear full PPE during handling
- 7.2 **Safe Storage**

- Storage Conditions: Cool, dry, dark warehouse; ≤25°C, relative humidity ≤60%; airtight sealed container
- Incompatibilities: Strong acids, strong oxidizing agents, heavy metal salts, alkaline solutions
- Storage Class (TRGS 510): 10 (Toxic Solids, Non-combustible)
- Shelf Life: 24 months (unopened, specified conditions)
- Storage Segregation: Store separately from food, feed and pharmaceutical raw materials for human use

SECTION 8: Exposure Controls/Personal Protection

8.1 Control Parameters

- Occupational Exposure Limit (OEL): No official national limit; recommended TWA: 0.5 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

SECTION 9: Physical and Chemical Properties

- Physical State: Crystalline powder
- Color: White to creamy white
- Odor: Almost odorless
- Melting Point: 237-242°C
- Boiling Point: N/A (decomposes before boiling)
- Flammability: Non-combustible
- Flash Point: N/A
- Autoignition Temperature: >360°C
- Solubility: Sparingly soluble in ethanol/methanol; insoluble in water; soluble in dilute mineral acids
- Density (25°C): 1.34 g/cm³
- Particle Size: 100-200 mesh (pharmaceutical grade, customizable)
- Explosive Properties: Non-explosive
- Oxidizing Properties: None
- pH Value: N/A (insoluble in water)

SECTION 10: Stability and Reactivity

10.1 **Chemical Stability:** Stable under recommended storage conditions (≤25°C, dry, sealed)

10.2 **Hazardous Reactions:** No hazardous reactions under normal use/handling; reacts with strong acids to form soluble salts

10.3 **Conditions to Avoid:** High temperature (>250°C), direct UV light, high humidity, contact with strong oxidizers/acids

10.4 **Incompatible Materials:** Concentrated HCl/H₂SO₄, hydrogen peroxide, potassium permanganate, sodium hydroxide solution

10.5 **Decomposition Products:** Nitrogen oxides (NO_x), hydrogen chloride (HCl), carbon monoxide (CO)

SECTION 11: Toxicological Information

11.1 Toxicological Effects

- Acute Toxicity: Oral (Rat, LD₅₀) = 250 mg/kg; Dermal (Rabbit, LD₅₀) >2000 mg/kg; Inhalation (Rat, LC₅₀) >5 mg/m³ (4h)
- Skin Irritation: Mild irritation (Rabbit, 4h exposure); no corrosion
- Eye Irritation: Severe irritation (Rabbit, 24h exposure); reversible with treatment
- Sensitization: No skin/respiratory sensitization (human/animal tests)
- Mutagenicity: Suspected genotoxicity (in vitro tests); no in vivo carcinogenicity data
- Carcinogenicity: Not classified by IARC/EPA/NTP
- Reproductive Toxicity: May cause fetal harm at high dosages (animal tests); avoid exposure during pregnancy/lactation
- Target Organ Toxicity: Gastrointestinal tract, eyes; potential hematological effects at chronic high exposure

SECTION 12: Ecological Information

12.1 **Toxicity:** Fish (Zebrafish, LC₅₀) = 120 mg/L (96h); Daphnia (EC₅₀) = 85 mg/L (48h);

Algae (EC₅₀) = 150 mg/L (72h) 12.2 **Persistence and Degradability:** Moderately

biodegradable (BOD₅/COD = 0.45) in aquatic environments; degradation half-life = 28-45

days 12.3 **Bioaccumulative Potential:** Moderate (log Kow = 3.8); may bioaccumulate in aquatic

food chains 12.4 **Mobility in Soil:** Low mobility; binds strongly to soil organic matter; no leaching

to groundwater 12.5 **PBT/vPvB:** Not classified as PBT/vPvB 12.6 **Other Effects:** Slightly toxic to soil

microorganisms at high concentrations

SECTION 13: Disposal Considerations

13.1 **Waste Treatment:** Dispose via licensed hazardous chemical waste treatment facilities; incinerate at high temperature (>800°C) with gas scrubbing to remove toxic fumes; **do not**

dispose of with ordinary waste 13.2 **Packaging Waste:** Rinse packaging with dilute acid then

water; dispose as hazardous plastic/metal waste; do not recycle with food 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. (Pyrimethamine) 14.3 **Transport Hazard Class:** 6.1 (Toxic substances) 14.4 **Packaging Group:**

III 14.5 **Environmental Hazards:** IMDG: Marine pollutant (No) 14.6 **Special Precautions:** Transport

at ≤25°C; avoid direct sunlight, moisture, collision and breakage; store separately from

food/feed/non-toxic goods 14.7 **Incompatible Materials:** Avoid transport with strong acids, oxidizing agents and alkaline solutions

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



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- 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 regulations

SECTION 16: Other Information

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



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