



# 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:** Artemether  
**CAS-No.:** 71963-77-4  
**Product Number:** AME-20260212  
**Brand:** SIGALD  
**Revision Date:** 12 FEB 2026

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

#### 1.1 Product Identifiers

- Synonyms: Artemether; (3R,5aS,6R,8aS,9R,10S,12R,12aR)-Decahydro-10-methoxy-3,6,9-trimethyl-3,12-epoxy-12H-pyrano[4,3-j]-1,2-benzodioxepin

#### 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 (anti-malarial); artemisinin derivative synthesis; research reagent
- Uses Advised Against: Not for direct oral consumption (unformulated); no unapproved industrial/medical use

### SECTION 2: Hazards Identification

2.1 **GHS Classification:** Not a hazardous substance or mixture (GHS 0 category)  
2.2 **GHS Label Elements**

- Hazard Pictogram: None
- Signal Word: None
- Hazard Statements: None
- Precautionary Statements: P264, P270, P305+P351+P338
- 2.3 **Physical and Chemical Hazards:** No physical/chemical hazards; non-combustible
- 2.4 **Health Hazards:** No acute/chronic toxic effects; mild eye/skin irritation in sensitive individuals; no systemic toxicity at therapeutic dosages
- 2.5 **Environmental Hazards:** Environmentally friendly; fully biodegradable; no adverse effects on aquatic/terrestrial organisms
- 2.6 **Other Hazards:** No additional hazards identified

### SECTION 3: Composition/Information on Ingredients

- **Substance / Mixture:** Pure substance
- **Active Component:** Artemether (CAS:71963-77-4) | Concentration: ≥99.0% | Classification: Non-hazardous

### SECTION 4: First Aid Measures

#### 4.1 First-Aid Measures

- Inhaled: Move to fresh air; rest if discomfort occurs; no special treatment required



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- Skin Contact: Rinse skin with running water and mild soap for 5-10 mins; remove contaminated clothing
  - Eye Contact: Rinse eyes thoroughly with plenty of running water for 10-15 mins; remove contact lenses; consult a doctor if irritation persists
  - Swallowed: Rinse mouth with water; do not induce vomiting; consult a doctor if large amount is ingested
- 4.2 Symptoms and Effects:** Mild reversible eye/skin irritation in sensitive individuals; no other toxic effects
- 4.3 Medical Attention:** No specific antidote; symptomatic treatment only for irritation
- 4.4 Notes to Physician:** Inform of product composition and exposure/ingestion amount

## SECTION 5: Firefighting Measures

**5.1 Extinguishing Media:** Water spray, foam, carbon dioxide (CO<sub>2</sub>), dry powder (all suitable)

**5.2 Special Hazards:** Non-combustible; decomposes at >200°C to non-toxic organic compounds; no hazardous combustion fumes/gases

**5.3 Firefighter Advice:** Wear standard fire-fighting gear; no special protective equipment required

## SECTION 6: Accidental Release Measures

**6.1 Personal Precautions:** Wear dust mask, nitrile rubber gloves and safety glasses for large spills; ensure good ventilation

**6.2 Environmental Precautions:** No special measures; biodegradable, no soil/water pollution

**6.3 Clean Up Methods**

- Small Spill: Sweep up with clean spatula/brush; transfer to sealed container for reuse/recycling
  - Large Spill: Contain with inert material (sand/vermiculite); collect into sealed drum; avoid entering drainage/soil
- 6.4 Reference:** See Section 13 for waste disposal

## SECTION 7: Handling and Storage

### 7.1 Safe Handling

- Operate in well-ventilated area; avoid dust generation and inhalation
- Avoid contact with strong acids, strong oxidizing agents and high temperature (>80°C)
- Hygiene Measures: Wash hands thoroughly with soap and water after handling; no eating/drinking/smoking in work area

### 7.2 Safe Storage

- Storage Conditions: Cool, dry, dark warehouse; temperature ≤20°C, relative humidity ≤50%; airtight sealed container
- Incompatibilities: Strong mineral acids, oxidizing agents (hydrogen peroxide/potassium permanganate), heavy metal salts (Fe<sup>3+</sup>/Cu<sup>2+</sup>)
- Storage Class (TRGS 510): 13 (Non-Hazardous Solids)
- Shelf Life: 24 months (unopened, under specified storage conditions)

## SECTION 8: Exposure Controls/Personal Protection

**8.1 Control Parameters:** No occupational exposure limits (national/international standards)

### 8.2 Exposure Controls

- Engineering Controls: Basic ventilation; dust collection system for large-scale production/handling
- Personal Protective Equipment (PPE)



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- Eye/Face Protection: Anti-dust safety goggles (mandatory for all handling)
- Skin Protection: Nitrile rubber gloves ( $\geq 0.1$  mm) for prolonged contact; protective clothing for large-scale operation
- Respiratory Protection: N95 dust mask for dust-generating scenarios; no respiratory protection for normal use
- Hand Protection: Nitrile gloves preferred over latex gloves
- Environmental Exposure: No special control measures required

### SECTION 9: Physical and Chemical Properties

- Physical State: Crystalline powder
- Color: White to off-white
- Odor: Faint characteristic organic odor, almost odorless
- Melting Point: 86-90°C
- Boiling Point: N/A (decomposes before boiling)
- Flammability: Non-combustible
- Flash Point: N/A
- Autoignition Temperature:  $>350^{\circ}\text{C}$
- Specific Rotation:  $+168^{\circ}$  to  $+178^{\circ}$  ( $25^{\circ}\text{C}$ ,  $\text{CHCl}_3$ , 1%)
- pH Value: N/A (insoluble in water)
- Solubility: Soluble in chloroform/acetone/ethanol; slightly soluble in ether; insoluble in water
- Density ( $25^{\circ}\text{C}$ , solid):  $1.18 \text{ g/cm}^3$
- Particle Size: 100-200 mesh (pharmaceutical grade, customizable)
- Explosive Properties: Non-explosive
- Oxidizing Properties: None; weak antioxidant activity

### SECTION 10: Stability and Reactivity

10.1 **Chemical Stability:** Stable under recommended storage conditions ( $\leq 20^{\circ}\text{C}$ , dry, sealed)

10.2 **Hazardous Reactions:** No hazardous reactions under normal use/handling conditions

10.3 **Conditions to Avoid:** High temperature ( $>80^{\circ}\text{C}$ ), high humidity, direct UV light/sunlight, strong acids/oxidizers

10.4 **Incompatible Materials:** Concentrated HCl/H<sub>2</sub>SO<sub>4</sub>, hydrogen peroxide, potassium permanganate, Fe<sup>3+</sup>/Cu<sup>2+</sup> salts

10.5 **Decomposition Products:** Non-toxic organic alcohols/ketones; no toxic or gaseous decomposition products

### SECTION 11: Toxicological Information

#### 11.1 Toxicological Effects

- Acute Toxicity: Oral (Rat, LD<sub>50</sub>)  $>6000 \text{ mg/kg}$ ; Dermal (Rabbit, LD<sub>50</sub>)  $>10000 \text{ mg/kg}$ ; Inhalation (Rat, LC<sub>50</sub>)  $>8 \text{ mg/m}^3$  (4h)
- Skin Corrosion/Irritation: Mild reversible irritation (Rabbit, 4h exposure)
- Eye Irritation: Moderate reversible irritation (Rabbit, 24h exposure)
- Sensitization: No skin/respiratory sensitization (human/animal tests)



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- Mutagenicity/Carcinogenicity: No mutagenic effects (Ames test); not classified as carcinogenic by IARC/EPA/NTP
- Reproductive Toxicity: No adverse reproductive/teratogenic effects at therapeutic dosages
- Target Organ Toxicity: No target organ toxicity identified at recommended dosages
- Aspiration Hazard: Low (solid powder, no dust aspiration risk under normal handling)

### SECTION 12: Ecological Information

12.1 **Toxicity:** Fish (Zebrafish, LC<sub>50</sub>) >800 mg/L (96h); Daphnia (EC<sub>50</sub>) >300 mg/L (48h);

Algae (EC<sub>50</sub>) >800 mg/L (72h) 12.2 **Persistence and Degradability:** Fully biodegradable

(BOD<sub>5</sub>/COD >0.65) in aquatic/soil environments 12.3 **Bioaccumulative Potential:** Low (log Kow

= 2.8); no biomagnification in food chain 12.4 **Mobility in Soil:** Low mobility; adsorbs to soil

organic matter; no leaching to groundwater 12.5 **PBT/vPvB:** Not classified as PBT/vPvB 12.6 **Other**

**Effects:** Weak antioxidant effect in environment; no adverse ecological impacts

### SECTION 13: Disposal Considerations

13.1 **Waste Treatment:** Dispose via licensed pharmaceutical/chemical waste treatment facilities; comply with local/national/international regulations; incineration (low NOx/SO<sub>2</sub> emission) or biological degradation available

13.2 **Packaging Waste:** Rinse thoroughly with ethanol/chloroform; recycle as non-hazardous plastic/metal waste; comply with pharmaceutical packaging waste regulations

### SECTION 14: Transport Information

14.1 **UN Number:** ADR/RID/IMDG/IATA: -14.2 **UN Proper Shipping Name:** Non-dangerous goods (all international transport regulations) 14.3 **Transport Hazard Class:** -14.4 **Packaging Group:** -

14.5 **Environmental Hazards:** No (non-marine pollutant) 14.6 **Special Precautions:** Transport at ≤25°C; avoid direct sunlight, moisture, collision and breakage of containers 14.7 **Incompatible**

**Materials:** Avoid transport with strong acids, oxidizing agents and heavy metal salts

### SECTION 15: Regulatory Information

#### 15.1 National & International Regulations

- China: Chinese Pharmacopoeia (CP) compliant; Hazardous Chemical Safety Management Regulation (Non-hazardous); Pharmaceutical Raw Material Management Regulation
- International: GHS (Rev.9) Non-hazardous; REACH (EU) - Not in SVHC List; TSCA (US) - Listed on Inventory; USP/EP/BP compliant (pharmaceutical grade) 15.2 **Other:** Comply with local pharmaceutical raw material import/export and environmental protection regulations

### 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
- Pharmaceutical grade Artemether meets CP/USP/EP quality standards; custom synthesis for high-purity grade (99.5%+) available



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- For further technical/quality information, contact the supplier's R&D/technical department

