



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)

SECTION 1: Identification

1.1 Product Identifiers

- Product Name: Stearic Acid
- Product Number: STA-20260210
- Brand: SIGALD
- CAS-No.: 57-11-4

Synonyms: Octadecanoic acid; n-Stearic acid

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

- Identified Uses: Cosmetics/toiletries (emulsifier, thickener), plastics/rubber (lubricant, plasticizer), food additive (anti-caking agent, emulsifier), soap/detergent production, candle making.
- Uses Advised Against: No restricted uses when used as directed; avoid heating to decomposition temperature (> 300°C).

SECTION 2: Hazards Identification

2.1 GHS Classification: Skin irritation (Category 2); Eye irritation (Category 2A)2.2 GHS Label Elements

- Hazard Pictogram: GHS07 (Exclamation mark)
- Signal Word: Warning
- Hazard Statements: H315 (Causes skin irritation), H319 (Causes serious eye irritation)
- Precautionary Statements: P264, P280, P305+P351+P3382.3 Physical/Chemical Hazards: Combustible (powder/flake); no explosive risks; decomposes at high temperature to release acrid smoke.2.4 Health Hazards: Mild skin/eye irritation; no acute toxicity; inhalation of heated vapor may cause respiratory irritation.2.5 Environmental Hazards: Low aquatic toxicity; biodegradable; no environmental persistence.

SECTION 3: Composition

- Substance / Mixture: Pure Substance (with minor palmitic acid impurity, typical for natural stearic acid)
- Formula: C₁₈ H₃₆ O₂
- Molecular Weight: 284.48 g/mol



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>

- Concentration: $\geq 98.0\%$ (stearic acid); $\leq 2.0\%$ (palmitic acid, non-hazardous)
- Hazardous Ingredients: None

SECTION 4: First Aid Measures

- Inhaled: Move to fresh air. If coughing/irritation persists, consult a doctor.
- Skin Contact: Rinse skin with running water and soap for 5 minutes; remove contaminated clothing.
- Eye Contact: Rinse with plenty of water for 10-15 minutes (hold eyelids open). Consult a doctor if irritation remains.
- Swallowed: Rinse mouth with water; no special treatment needed (non-toxic in small amounts); seek medical advice if large amounts are ingested (may cause gastrointestinal discomfort).

SECTION 5: Firefighting Measures

- Suitable Extinguishing Media: Water spray, foam, CO₂, dry powder.
- Special Hazards: Combustible as powder/flake; heated vapor may form flammable mixtures with air; decomposes at $> 300^{\circ}\text{C}$ to release acrid, irritating smoke.
- Firefighter Protection: Wear standard fire-fighting gear and respiratory protection (for smoke); cool containers with water spray to prevent re-ignition.

SECTION 6: Accidental Release Measures

- Personal Precautions: Wear gloves, eye protection for large spills; dust mask for powder/flake spills (avoid inhalation).
- Cleanup Methods: Sweep up with inert materials (sand/vermiculite) for powder/flake; wipe liquid stearic acid (melted) with absorbent paper and dispose.
- Environmental Precautions: No special measures; biodegradable, no harm to soil/water.

SECTION 7: Handling and Storage

- Handling: Operate in well-ventilated area; avoid dust inhalation and skin/eye contact; melt stearic acid in closed containers (no open heating); avoid contact with strong oxidizing agents.
- Storage Conditions: Cool, dry, well-ventilated warehouse ($\leq 30^{\circ}\text{C}$); store in sealed HDPE drums/fiber drums; avoid direct sunlight and high temperature (prevents melting); keep away from open flames and strong oxidizing agents.
- Incompatibilities: Strong oxidizing agents (e.g., hydrogen peroxide, potassium permanganate), strong alkalis (at high temperature).
- Shelf Life: 36 months (unopened).

SECTION 8: Exposure Controls/Personal Protection

- PPE: Nitrile gloves, safety goggles for routine handling; dust mask for powder/flake operations; heat-resistant gloves for melting stearic acid.
- Engineering Controls: Basic ventilation; dust collection system for bulk powder processing; local exhaust for melting operations.
- Occupational Exposure Limits: No established limits (non-toxic, low irritation).

SECTION 9: Physical and Chemical Properties



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>

- Physical State: White flakes/powder (solid at 25°C); liquid when melted (> 60°C)
- Color: White to off-white
- Odor: Faint, fatty odor
- Solubility: Insoluble in water, soluble in ethanol, ether, chloroform and vegetable/mineral oils
- Acid Value: 195-205 mg KOH/g
- Saponification Value: 196-206 mg KOH/g
- Iodine Value: ≤ 2.0 g I₂/100g
- Melting Point: 54-60°C
- Boiling Point: 383°C
- Flash Point: 196°C (Closed Cup)
- Density (25°C): 0.94 g/cm³ (solid); 0.85 g/cm³ (melted)
- Viscosity (70°C, melted): 5-10 mPa·s

SECTION 10: Stability and Reactivity

- Stable under normal storage/use conditions ($\leq 30^\circ\text{C}$, sealed).
- Incompatible with: Strong oxidizing agents (may react exothermically), strong alkalis (saponification at high temperature: forms stearates).
- Hazardous Reactions: No hazardous reactions under normal use; saponification with strong alkalis (intentional reaction for soap production).
- Decomposition Products: Carbon monoxide, carbon dioxide, acrid fatty acid vapors (at > 300°C).

SECTION 11: Toxicological Information

- Oral LD₅₀ (Rat): > 10,000 mg/kg (non-toxic)
- Dermal LD₅₀ (Rabbit): > 5000 mg/kg (non-toxic)
- Skin Irritation: Mild (Rabbit, 4h; reversible)
- Eye Irritation: Moderate (Rabbit, 24h; reversible)
- Inhalation Toxicity: Low (heated vapor may cause mild respiratory irritation)
- No mutagenic, carcinogenic or reproductive toxic effects reported; safe for food/cosmetic use (per FDA/EU standards).

SECTION 12: Ecological Information

- Aquatic Toxicity (Zebrafish LC₅₀): > 1000 mg/L (96h) (low toxicity)
- Persistence and Degradability: Fully biodegradable (BOD₅ /COD > 0.7) in soil/water (fatty acid degradation by microorganisms).
- Bioaccumulative Potential: Low (log K_{oc}: 4.0-5.0; no biomagnification in food chain).
- Environmental Fate: Degrades to CO₂ and water; no soil/water accumulation.

SECTION 13: Disposal Considerations

- Product Waste: Dispose via licensed waste facilities; or incinerate (controlled temperature, no acrid smoke); melted stearic acid can be recycled for re-use.



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>

- Packaging Waste: Rinse with ethanol/vegetable oil; recycle as plastic/metal/fiber waste (non-hazardous).
- No environmental restrictions for disposal (biodegradable).

SECTION 14: Transport Information

- UN Number: Not dangerous goods
- Transport Hazard Class: -
- Packaging Group: -
- Marine Pollutant: No
- Special Precautions: Avoid high temperature (prevents melting), open flames and strong oxidizing agents during transport; keep sealed to prevent moisture/dust.

SECTION 15: Regulatory Information

- Complies with GHS, REACH, TSCA, FDA (Food Additive, E570), EU Cosmetics Regulation (EC 1223/2009), GB 1886.103-2015 (China food standard).
- Listed on FDA GRAS (Generally Recognized As Safe); EU E-number E570 (food additive); no EU SVHC classification.

SECTION 16: Other Information

- Revision Date: 10 FEB 2026
- Natural stearic acid typically contains 1-2% palmitic acid (C16), which is a normal impurity and does not affect performance.

纳维盈医化科技
NEWAY SINOPHC TECH