



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)

- **Feed Grade Carotenoids**(Compliant with GB/T 16483, GHS Rev.9, IMDG, IATA)**Revision Date:**
22 FEB 2026

SECTION 1: Identification

1.1 Product Identifiers

- Name: Carotenoids (Feed Grade)
- Product Number: CAR-FEED-20260222
- Brand: SIGALD
- CAS No.: N/A (Composite; main components: β -Carotene 7235-40-7, Lutein 127-40-2)
- Synonyms: Natural Carotenoid Mixture; Feed Grade Carotenoid Extract

1.2 Supplier Details

- Company: NEWAY SINOPHC TECH. LIMITED
- Address: RM. 204, BLDG 3, 188 Aona Rd, Shanghai FTZ, China
- Tel: +86-021-50350029 | Fax: +86-021-50350029

1.3 Emergency Contact: +86-021-50350029 (24h)

1.4 Uses: **Exclusive for animal feed additive.** Natural colorant and nutritional supplement; improves flesh/egg/yolk pigmentation, enhances antioxidant capacity and immune function of livestock, poultry and aquaculture animals. Not for human consumption, pharmaceutical or industrial use.

SECTION 2: Hazards Identification

- **GHS Classification:** Not a hazardous substance or mixture (GHS 0 category)
- **Pictogram:** None
- **Signal Word:** None
- **Hazard Statements:** None
- **Precautionary Statements:** None

Summary: Orange red non-toxic fine powder. No acute/chronic health hazards; no physical/chemical hazards. Mild dust irritation may occur during bulk handling for sensitive individuals. Environmentally friendly, fully biodegradable, non-toxic to aquatic organisms.

SECTION 3: Composition/Information on Ingredients

- **Substance/Mixture:** Natural composite mixture (plant extract)
- **Main Active Components:** β -Carotene (3.0-4.0%), Lutein (2.5-3.5%), Zeaxanthin (1.0-2.0%), Astaxanthin (0.5-1.0%)
- **Carrier:** Food-grade maltodextrin (80.0-85.0%)
- **Hazardous Ingredients:** None (all components comply with feed grade safety standards)
- **Total Carotenoids Content:** 10.0-12.0% (w/w)

SECTION 4: First Aid Measures

- **Inhalation:** Move to fresh air if dust inhalation causes coughing. No special treatment required; symptoms will subside spontaneously. Seek medical advice only if irritation persists.



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>

- **Skin Contact:** Rinse contaminated skin with plenty of running water. Wipe off residual powder with a dry cloth first if needed. No skin irritation; no special treatment required.
- **Eye Contact:** Rinse eyes thoroughly with clean running water for 5-10 minutes to remove dust. Remove contact lenses if present. Consult an ophthalmologist only if mild irritation occurs in sensitive individuals.
- **Ingestion (Human):** Rinse mouth with water. The product is non-toxic; no adverse effects from accidental ingestion. Seek medical advice only if gastrointestinal discomfort occurs (rare).
- **Antidote:** No specific antidote. Treat symptomatically if needed.

SECTION 5: Firefighting Measures

- **Extinguishing Media:** Water spray, carbon dioxide (CO₂), dry chemical powder, foam. All common agents are suitable.
- **Hazards in Fire:** Non-combustible. Decomposes at high temperatures (>200°C) to produce non-toxic carbon dioxide and water; no hazardous combustion gases. No explosion risk.
- **Firefighter Advice:** Wear standard fire-fighting gear and dust mask to avoid inhalation of combustion dust. Cool surrounding containers with water spray to prevent thermal expansion.

SECTION 6: Accidental Release Measures

- **Personal Precautions:** Wear N95 dust mask and disposable gloves for large spills. Ensure good ventilation in the spill area to avoid dust accumulation.
- **Cleanup Methods:**
 - Small Spill: Sweep into a sealed HDPE container for reuse. Wipe the area with a dry cloth and dispose of the cloth as general waste.
 - Large Spill: Collect with a dust-free vacuum cleaner into sealed drums. Avoid creating dust clouds during cleanup.
- **Environmental Precautions:** No special environmental precautions. The product is fully biodegradable; spilled powder can be left on soil (acts as a mild organic nutrient) and requires no special treatment. Prevent large amounts from entering water bodies to avoid temporary water discoloration (no toxic impact).

SECTION 7: Handling and Storage

- **Handling Precautions:** Operate in a well-ventilated area with local dust extraction for bulk handling. Avoid generating dust during weighing and mixing. Wash hands thoroughly after handling. Avoid contact with strong oxidizers and high-temperature environments to prevent component degradation.
- **Storage Conditions:**
 - Temperature: ≤25°C; store in a cool, dark place (avoid direct sunlight)
 - Relative Humidity: ≤60%
 - Package: Keep tightly sealed in original aluminum foil composite bags or HDPE drums with inner PE liners (lightproof, moisture-proof)
 - Shelf Life: **24 months (unopened, under specified conditions)**



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>

- Incompatibilities: Strong oxidizing agents, strong acids, high temperature (>60°C), direct sunlight
- Segregation: Store separately from strong oxidizers and non-feed grade chemicals. Mark "FEED GRADE" clearly.

SECTION 8: Exposure Controls/Personal Protection

- **Occupational Exposure Limit (OEL):** No specific limit for carotenoids; follow general dust limits (10 mg/m³ TWA)
- **Engineering Controls:** Local exhaust ventilation systems in bulk handling areas to control dust concentration. Use closed mixing systems to minimize dust release.
- **Personal Protective Equipment (PPE):**
 - Respiratory: N95 dust mask (for bulk loading/unloading and mixing only)
 - Eyes: Safety glasses (recommended for large-scale handling to prevent dust from entering eyes)
 - Skin: Disposable nitrile gloves (optional; no skin irritation risk)
 - Other: Wear dust-proof clothing to avoid powder contamination of work clothes.

SECTION 9: Physical and Chemical Properties

- **Physical State:** Fine powder
- **Color:** Red to orange red
- **Odor:** Odorless
- **Melting Point:** N/A (composite mixture; individual components melt at 180-220°C)
- **Boiling Point:** N/A (decomposes before boiling)
- **Flash Point:** Not applicable (non-combustible)
- **Autoignition Temperature:** >300°C
- **Density (Bulk):** 0.30-0.60 g/cm³ (25°C)
- **Solubility:** Insoluble in water; soluble in vegetable oil and organic solvents
- **pH Value:** N/A (water-insoluble)
- **Vapor Pressure:** <0.0001 kPa (25°C)
- **Stability to Light:** Sensitive to direct sunlight (causes degradation)
- **Stability to Heat:** Stable at ≤60°C; degrades at >60°C

SECTION 10: Stability and Reactivity

- **Stability:** Chemically stable under recommended storage conditions (cool, dark, sealed, ≤25°C). Degrades under direct sunlight, high temperature or contact with strong oxidizers (loss of color and activity).
- **Possibility of Hazardous Reactions:** No hazardous reactions under normal use and storage conditions.
- **Conditions to Avoid:** Direct sunlight, high temperature (>60°C), strong oxidizing agents, strong acids, prolonged exposure to air (moisture).



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>

- **Incompatible Materials:** Hydrogen peroxide, potassium permanganate, concentrated sulfuric acid and other strong oxidizers/acids.
- **Hazardous Decomposition Products:** No hazardous decomposition products; decomposes into non-toxic carbon dioxide, water and carotenoid derivatives at high temperature.
- **Hazardous Polymerization:** Will not occur.

SECTION 11: Toxicological Information

- **Acute Toxicity:**

- Oral (Rat) LD₅₀ >20,000 mg/kg (Non-toxic)
- Dermal (Rabbit) LD₅₀ >20,000 mg/kg (Non-toxic)
- Inhalation (Rat) LC₅₀ >50 mg/m³ (4-hour exposure, Non-toxic)

- **Skin Corrosion/Irritation:** No skin irritation (Rabbit, 4-hour exposure; GHS Category 0)
- **Serious Eye Damage/Eye Irritation:** Mild transient irritation from dust (Rabbit, 24-hour exposure; fully reversible)
- **Respiratory/Skin Sensitization:** No sensitizing effects (no known allergic reactions)
- **Carcinogenicity:** IARC Classification - Group 3 (not classifiable); natural carotenoids are recognized as anti-oxidant and anti-carcinogenic nutrients.
- **Reproductive Toxicity:** No reproductive toxicity; carotenoids are essential for animal reproductive health.
- **Specific Target Organ Toxicity:** No target organ toxicity at recommended feed levels.
- **Aspiration Hazard:** Low (fine powder, no aspiration risk under normal handling).

SECTION 12: Ecological Information

- **Aquatic Toxicity:**

- LC₅₀ (Zebrafish, 96h) >5000 mg/L (Non-toxic)
- EC₅₀ (Daphnia, 48h) >2000 mg/L (Non-toxic)

- **Persistence and Degradability:** Fully biodegradable (BOD₅ /COD >0.7) in soil and aquatic environments; degraded by microorganisms within 14-28 days.
- **Bioaccumulative Potential:** No bioaccumulation potential (natural organic compounds, metabolized by organisms).
- **Mobility in Soil:** Low mobility; binds to soil organic matter and clay particles, no leaching risk.
- **Environmental Impact:** Environmentally friendly; no adverse effects on soil, water and terrestrial/aquatic organisms. Spilled product can improve soil organic matter content; no secondary pollution.

SECTION 13: Disposal Considerations

- **Product Waste:** Expired or degraded carotenoids are non-hazardous waste. Can be disposed of as general solid feed waste or mixed into organic fertilizer (mild nutrient). Do not reuse degraded product (loss of color and nutritional activity) in feed.



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 packaging thoroughly with water or vegetable oil (for residual powder); recycle the packaging as non-hazardous plastic/metal waste or dispose of as general waste.
- **Disposal Compliance:** Comply with China General Solid Waste Pollution Control Law and local environmental regulations for solid waste disposal. No special treatment required for waste product.

SECTION 14: Transport Information

- **UN Number:** None (Non-hazardous goods for transport)
- **UN Proper Shipping Name:** Carotenoids (Feed Additive), Not Dangerous Goods
- **Hazard Class:** None
- **Packaging Group:** None
- **Environmental Hazard:** No (not a marine pollutant)
- **Transport Precautions:**
 - Transport in covered, dry ordinary cargo vehicles; use lightproof packaging to avoid direct sunlight.
 - Prevent package damage, moisture absorption, dust dispersion and high-temperature exposure ($\leq 30^{\circ}\text{C}$) during transport.
 - Avoid mixing with strong oxidizers, strong acids and non-feed grade chemicals in the same vehicle.
 - Protect packages from rain, snow and direct sunlight during transportation.

SECTION 15: Regulatory Information

- **China:** Compliant with GB 13078.1-2017 (Feed Hygiene Standard), listed in the *National Catalogue of Feed Additives* (natural colorant and nutritional additive). Compliant with GB 7718 (feed label standard).
- **EU:** Compliant with EC 1831/2003 (Feed Additives Regulation), approved as a natural feed colorant and nutritional supplement. REACH registered (not in SVHC List).
- **US:** TSCA listed (as natural plant extracts), approved by FDA/CVM for use in animal feed (21 CFR Part 573). Meets NRC nutritional standards for animals.
- **International:** Meets Codex Alimentarius Commission standards for natural feed additives and colorants. Complies with OIE animal feed safety standards.

SECTION 16: Other Information

- **Disclaimer:** This MSDS is for feed grade carotenoids (natural composite mixture) only. Misuse for non-feed purposes (e.g., human consumption, industrial use) is at the user's sole risk. The supplier is not liable for damages resulting from improper handling, storage, transport or disposal of this product.
- **Key Note:** Carotenoids are light and heat sensitive; ensure sealed, lightproof storage and minimize high-temperature exposure during feed processing to retain activity.
- **Revision Date:** 22 FEB 2026



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>



纳维盈医化科技
NEWAY SINOPHC TECH