



# 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:

Calcium Saccharin (Feed Grade) Revision Date: 27 FEB 2026

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

#### 1.1 Product Identifiers

- Product Name: Calcium Saccharin (Feed Grade)
- Product Number: CAS-F20260229
- Brand: SIGALD
- CAS-No.: 6485-34-3
- Synonyms: Saccharin calcium dihydrate; 1,2-Benzisothiazolin-3-one 1,1-dioxide calcium salt dihydrate
- Molecular Formula:  $C_{14}H_8 \text{ CaN}_2O_6 \cdot S_2 \cdot 2H_2O$
- Molecular Weight: 468.46 g/mol

#### 1.2 Details of the supplier of the safety data sheet

- 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

- Emergency Phone #: +86-021-50350029 (CHEMTREC)

#### 1.4 Relevant Identified Uses and Uses Advised Against

- Identified Uses: Non-nutritive sweetener for animal feed; flavor enhancer for poultry, livestock and aquaculture feed; mask bitter taste of feed additives.
- Uses Advised Against: Not for human food, pharmaceutical, medical or cosmetic use; no use in infant food products.

### SECTION 2: Hazards Identification

- **GHS Classification:** Acute toxicity (oral, Category 4); Eye irritation (Category 2); Specific target organ toxicity (single exposure, Category 3, Gastrointestinal tract)
- **GHS Label Elements**
  - Hazard Pictogram: (Exclamation mark)
  - Signal Word: **Warning**
  - Hazard Statements: H302 (Harmful if swallowed), H319 (Causes serious eye irritation), H335 (May cause respiratory irritation)
  - Precautionary Statements: P261, P264, P270, P271, P280, P301+P312, P305+P351+P338, P330, P337+P313
- **Physical and Chemical Hazards:** Non-combustible, no explosion risk; no physical hazards under normal use.



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- **Health Hazards:** Harmful if swallowed; causes serious eye irritation; may cause mild respiratory irritation upon dust inhalation; no chronic toxicity reported for feed grade use.
- **Environmental Hazards:** Low aquatic toxicity; not biodegradable; no bioaccumulation potential; avoid direct discharge into water bodies.
- **Other Hazards:** No additional hazards identified for industrial handling.

## SECTION 3: Composition/Information on Ingredients

- **Substance / Mixture:** Pure substance (hydrate)
- **Active Component:** Calcium Saccharin dihydrate (100%, CAS 6485-34-3)
- **Hazardous Ingredients:** No other hazardous ingredients present

## SECTION 4: First Aid Measures

### 4.1 Description of First-Aid Measures

- If Inhaled: Move to fresh air, keep at rest in a position comfortable for breathing. If irritation or coughing persists, consult a doctor.
- In Case of Skin Contact: Rinse skin thoroughly with plenty of running water for 10-15 minutes. Remove contaminated clothing and wash before reuse. No special treatment needed if no irritation.
- In Case of Eye Contact: Rinse cautiously with water for 15-20 minutes. Remove contact lenses if present and easy to do. Continue rinsing. If eye irritation persists, seek medical advice immediately.
- If Swallowed: Rinse mouth with water. Do not induce vomiting. If feeling unwell, call a poison center or doctor immediately. Have the product container or label at hand.

### 4.2 Most Important Symptoms and Effects

- Acute Effects: Nausea, vomiting, diarrhea if ingested in large amounts; severe eye redness and irritation; mild cough from dust inhalation.
- Delayed Effects: No known delayed toxic effects for feed grade exposure levels.

4.3 **Immediate Medical Attention:** Seek medical help if ingestion, severe eye irritation or persistent respiratory symptoms occur. 4.4 **Notes to Physician:** Treat symptomatically; no specific antidote available.

## SECTION 5: Fire-Fighting Measures

5.1 **Extinguishing Media:** Suitable - Water spray, foam, carbon dioxide (CO<sub>2</sub>), dry powder; Unsuitable - No limitations of extinguishing agents. 5.2 **Special Hazards Arising from the**

**Substance:** Non-combustible; upon extreme high-temperature decomposition (>500°C), may release toxic sulfur oxides (SO<sub>x</sub>) and nitrogen oxides (NO<sub>x</sub>). 5.3 **Advice for Firefighters:** Wear self-contained breathing apparatus (SCBA) and full fire-fighting protective gear if decomposition is suspected; fight fire from a safe distance.

## SECTION 6: Accidental Release Measures

6.1 **Personal Precautions:** Wear dust mask (FFP2), nitrile rubber gloves and safety goggles; avoid dust inhalation and eye/skin contact; ensure good ventilation. 6.2 **Environmental**



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**Precautions:** Prevent powder from entering drains, sewers, rivers or other water bodies; sweep up spilled material to avoid environmental contamination.6.3 **Methods for Clean-Up:**

- Small Spill: Gently sweep up the powder and collect in a sealed plastic container for reuse or disposal.
- Large Spill: Contain with plastic barriers; transfer to sealed drums for professional disposal; do not wash into drainage.6.4 **Reference:** For disposal, see Section 13.

## SECTION 7: Handling and Storage

### 7.1 Precautions for Safe Handling

- Operate in a well-ventilated area; use dust suppression measures to avoid powder formation and inhalation.
- Avoid contact with eyes, skin and respiratory tract; wear specified PPE during handling.
- Do not eat, drink or smoke while handling the product; wash hands thoroughly after handling.
- Avoid mixing with strong acids or strong alkalis to prevent decomposition.

### 7.2 Conditions for Safe Storage

- Storage Conditions: Store in a cool, dry, well-ventilated warehouse; keep container tightly closed to prevent moisture absorption and caking; storage temperature  $\leq 30^{\circ}\text{C}$ , relative humidity  $\leq 75\%$ .
- Incompatibilities: Strong mineral acids, strong alkalis, oxidizing agents, reducing agents.
- Storage Class (TRGS 510): 13 (Non-Hazardous Solids, with minor hazards)
- Shelf Life: 24 months (unopened, under specified storage conditions).

## SECTION 8: Exposure Controls/Personal Protection

### 8.1 Control Parameters

- Occupational Exposure Limit (OEL): Saccharin (parent compound) - TWA  $10 \text{ mg/m}^3$  (respirable dust),  $20 \text{ mg/m}^3$  (total dust)8.2 **Exposure Controls**

- Engineering Controls: Local exhaust ventilation (LEV) recommended for large-scale processing; dust collection system to reduce airborne powder.
- Personal Protective Equipment (PPE):
  - Eye/Face Protection: Impact-resistant safety goggles with side shields (mandatory for all handling).
  - Skin Protection: Nitrile rubber gloves (thickness  $\geq 0.11 \text{ mm}$ ) and protective clothing for prolonged contact.
  - Respiratory Protection: FFP2 dust mask for regular handling; FFP3 mask for large-scale spill or dust generation.
  - Hand Washing: Provide clean water and soap for hand washing at the workplace.
- Environmental Exposure: Install dust collection systems to prevent environmental release; no direct discharge of waste or wash water.

## SECTION 9: Physical and Chemical Properties

a) Physical State: Crystalline powder b) Color: White to off-white c) Odor: Odorless d) Melting Point/Freezing Point: Decomposes at ~220°C (anhydrous form); no melting point for dihydrate e) Boiling Point: Not applicable (decomposes before boiling) f) Flammability: Non-combustible g) Flammability Limits: Not applicable h) Flash Point: Not applicable i) Autoignition Temperature: > 600°C j) Decomposition Temperature: ≥ 220°C (loses water, then decomposes) k) pH Value (1% in H<sub>2</sub>O, 25°C): 5.0 - 7.5 l) Viscosity: Not applicable (solid) m) Water Solubility: Soluble in water (≈ 20 g/L at 25°C) n) Solubility in Organic Solvents: Insoluble in ethanol, ether, chloroform and most organic solventso) Vapor Pressure (25°C): Negligible (< 0.0001 hPa) p) Density (25°C, solid): 1.65 g/cm<sup>3</sup> q) Bulk Density: 0.7 - 0.9 g/cm<sup>3</sup> r) Explosive Properties: Not explosives) Oxidizing Properties: None t) Hygroscopy: Slightly hygroscopic

## SECTION 10: Stability and Reactivity

10.1 **Chemical Stability:** Stable under recommended storage and use conditions (≤ 30°C, dry, sealed); stable in neutral and slightly acidic/basic aqueous solutions. 10.2 **Possibility of**

**Hazardous Reactions:** No hazardous reactions under normal use and handling conditions; no polymerization. 10.3 **Conditions to Avoid:** High temperature (>220°C), direct sunlight, moisture, contact with strong acids/alkalis. 10.4 **Incompatible Materials:** Concentrated sulfuric acid,

hydrochloric acid, sodium hydroxide, potassium hydroxide, strong oxidizing agents (e.g., hydrogen peroxide). 10.5 **Hazardous Decomposition Products:** Sulfur dioxide (SO<sub>2</sub>), sulfur trioxide (SO<sub>3</sub>), nitrogen dioxide (NO<sub>2</sub>), carbon monoxide (CO), carbon dioxide (CO<sub>2</sub>) and toxic smoke upon thermal decomposition.

SECTION 11: Toxicological Information

## SECTION 11: Toxicological Information

### 11.1 Information on Toxicological Effects

- Acute Toxicity: Oral (Rat, LD<sub>50</sub>) = 3200 mg/kg (harmful if swallowed); Dermal (Rabbit, LD<sub>50</sub>) > 5000 mg/kg (non-toxic via skin); Inhalation (Rat, LC<sub>50</sub>) > 10 mg/m<sup>3</sup> (4-hour exposure)
- Skin Corrosion/Irritation: Non-irritating to rabbit skin (4-hour exposure)
- Serious Eye Damage/Eye Irritation: Category 2 (causes serious eye irritation in rabbit tests)
- Respiratory/Skin Sensitization: No sensitizing effects reported
- Germ Cell Mutagenicity: No mutagenic effects in standard tests (Ames test, chromosome aberration)
- Carcinogenicity: IARC Class 3 (not classifiable as to its carcinogenicity to humans); no carcinogenic effects in animal feed studies
- Reproductive Toxicity: No adverse reproductive effects in animal tests at feed grade exposure levels
- Specific Target Organ Toxicity: Single exposure - Category 3 (gastrointestinal tract); no repeated exposure toxicity
- Aspiration Hazard: Low (solid powder, no aspiration risk for animals/humans)

11.2 **Additional Information:** Toxicological data confirms safe use at approved feed additive levels; no chronic toxicity for target animal species.



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### SECTION 12: Ecological Information

12.1 **Toxicity:** Fish (Zebrafish, LC<sub>50</sub>) = 1200 mg/L (96-hour exposure); Daphnia (EC<sub>50</sub>) = 800 mg/L (48-hour exposure); Algae (EC<sub>50</sub>) = 1500 mg/L (72-hour exposure) - low aquatic toxicity

12.2 **Persistence and Degradability:** Not readily biodegradable (BOD<sub>5</sub> /COD < 0.2) in aquatic environments

12.3 **Bioaccumulative Potential:** Very low (log Kow = -1.8); no

bioaccumulation in aquatic organisms or animals

12.4 **Mobility in Soil:** Moderate mobility; binds

weakly to soil organic matter; may leach into groundwater in high rainfall areas

12.5 **PBT/vPvB Assessment:** Not classified as PBT/vPvB (no bioaccumulation, low toxicity)

12.6 **Endocrine Disrupting Properties:** No endocrine disrupting effects reported in standard tests

12.7 **Other Adverse Effects:** May cause slight eutrophication in water bodies at high concentrations; no long-term environmental impacts at normal use levels.

### SECTION 13: Disposal Considerations

#### 13.1 Waste Treatment Methods

- Product Waste: Uncontaminated waste can be reused as feed additive; contaminated waste must be disposed of through licensed hazardous waste treatment facilities in accordance with local/national/international regulations. Do not dump into the environment.
- Packaging Waste: Rinse empty containers thoroughly with water; rinse water must be collected for treatment; dispose of rinsed packaging as non-hazardous waste or recycle.

13.2 **Disposal Notes:** Incineration is the recommended disposal method for waste (equipped with flue gas treatment to remove SO<sub>x</sub> and NO<sub>x</sub>); do not landfill large quantities of unused product.

### SECTION 14: Transport Information

14.1 **UN Number:** ADR/RID: 3077; IMDG: 3077; IATA-DGR: 3077

14.2 **UN Proper Shipping Name:** ADR/RID: Environmentally hazardous substance, solid, n.o.s. (Calcium Saccharin); IMDG:

Environmentally hazardous substance, solid, n.o.s. (Calcium Saccharin); IATA-DGR:

Environmentally hazardous solid, n.o.s. (Calcium Saccharin)

14.3 **Transport Hazard Class(es):** ADR/RID: 9; IMDG: 9; IATA-DGR: 9

14.4 **Packaging Group:** ADR/RID: III; IMDG: III; IATA-DGR: III

14.5 **Environmental Hazards:** ADR/RID: Yes; IMDG Marine Pollutant: Yes (P); IATA-DGR: Yes

14.6 **Special Precautions for User:** Transport at ≤ 30°C; avoid direct sunlight, rain, moisture and package collision; prevent powder leakage; do not transport with food, feed raw materials or incompatible materials.

14.7 **Incompatible Materials:** Avoid transport with strong acids, strong alkalis, oxidizing agents and foodstuffs.

### SECTION 15: Regulatory Information

#### 15.1 National Regulations (China)

- Hazardous Chemical Safety Management Regulation (Class 9 hazardous substance)
- Feed Hygiene Standard (GB 13078)
- Feed Additive Variety Catalogue (Ministry of Agriculture and Rural Affairs)
- Environmental Protection Law (Regulations for hazardous waste disposal)

#### 15.2 International Regulations



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- GHS Classification (Rev. 9): Acute oral toxicity Cat 4, Eye irritation Cat 2, STOT-SE Cat 3, Environmental hazard
- REACH (EU): Registered; not listed in SVHC Candidate List; complies with EC 1831/2003 (feed additives)
- TSCA (US): Listed on the TSCA Inventory; approved for animal feed use (FDA)
- IMDG Code: Class 9, Marine Pollutant (P)15.3 **Other Regulations:** Comply with local feed safety, hazardous chemical transport and environmental protection regulations; follow maximum residue limits (MRL) for animal products.

### SECTION 16: Other Information

- **Further Information:** This MSDS is based on current scientific knowledge and complies with GB/T 16483, GB/T 17519, GHS, IMDG and IATA standards. It is intended for safe handling, storage, transport and disposal of feed grade calcium saccharin. The supplier is not liable for damage caused by improper use, non-compliance with safety precautions or unapproved use.
- **Revision History:** First version (27 FEB 2026)

纳维盈医化科技  
NEWAY SINOPHC TECH