



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)

- Xylo-Oligosaccharide 50% (Powder)

(According to GB/T 16483 and GB/T 17519; Adapts to GHS, IMDG, IATA Standards)**Product Name:** Xylo-Oligosaccharide 50% (Powder)**Revision Date:** 28 FEB 2026

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

1.1 Product Identifiers

- Product Name: Xylo-Oligosaccharide 50% (Powder)
- Synonyms: XOS 50% Powder; Oligoxylose Powder; Xylo-oligosaccharides Dry Powder
- Product Number: XOS-50P-20260228
- Brand: SIGALD
- CAS-No.: 87-89-8 (Xylose, monomer reference)
- Main Components: Xylo-oligosaccharides (DP 2-10, 56.2%), Anhydrous excipient (food grade)
- Molecular Weight: Variable (oligomer mixture)

1.2 Details of the Supplier

- 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 Uses

- **Identified Uses:** Food additive (prebiotic, low-calorie sweetener); dietary supplement raw material; bakery & confectionery ingredient; animal feed additive; pharmaceutical excipient (binder, sweetener).
- **Uses Advised Against:** No specific restricted uses; not for industrial non-food/feed applications.

SECTION 2: Hazards Identification

2.1 GHS Classification

- **Not Classified** as hazardous according to GHS criteria (GHS 0 category)

2.2 GHS Label Elements

- **Pictograms:** None
- **Signal Word:** None
- **Hazard Statements:** None
- **Precautionary Statements:** None (standard handling precautions apply)

2.3 Physical and Chemical Hazards

Non-flammable, non-explosive, non-corrosive. No dust explosion hazard under normal handling; no physical/chemical hazards.

2.4 Health Hazards

- **Acute:** Generally regarded as safe (GRAS). May cause mild gastrointestinal discomfort (bloating, flatulence) if consumed in excessive amounts (>30g/day) due to prebiotic fermentation in the gut. Minor respiratory irritation if inhaled in large dust quantities (easily avoidable).
- **Chronic:** No known chronic health hazards with normal consumption/handling.

2.5 Environmental Hazards

- Not hazardous to the environment; readily biodegradable, non-toxic to aquatic/terrestrial organisms, no bioaccumulation potential.

2.6 Other Hazards

No additional hazards identified.



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SECTION 3: Composition/Information on Ingredients

- **Mixture:** Food-grade dry powder of natural prebiotic xylo-oligosaccharides with food-grade anhydrous excipient (anti-caking)
- **Non-Hazardous Ingredients:**

Ingredient	CAS No.	Concentration (w/w)	GHS Classification
Xylo-Oligosaccharides (DP 2-10)	-	50.0-56.2%	Non-hazardous
Food-grade Anhydrous Excipient	-	40.0-48.0%	Non-hazardous
Xylose (minor)	87-89-8	≤5.0%	Non-hazardous

SECTION 4: First Aid Measures

- **Inhalation:** If dust is inhaled and causes mild irritation, move to fresh air, rest and drink water. No special treatment required for normal exposure.
- **Skin Contact:** No adverse effects expected. Wipe off with dry cloth and rinse with water if desired; no irritation risk.
- **Eye Contact:** Rinse gently with plenty of running water for 5 minutes if powder enters eyes. No serious irritation expected; consult a doctor only if discomfort persists.
- **Ingestion:** Generally safe for oral consumption. If large amounts are ingested and cause severe gastrointestinal distress, drink water and consult a physician; do not induce vomiting.

SECTION 5: Firefighting Measures

- **Suitable Media:** Water spray, dry chemical powder, carbon dioxide (CO₂), foam.
- **Unsuitable Media:** None; all common extinguishing agents are effective.
- **Special Hazards:** Non-flammable. Combustion at extremely high temperatures may produce only carbon dioxide and water vapor; no toxic combustion products. No dust explosion risk under normal handling.
- **Advice:** Wear standard fire-fighting gear; treat as a non-combustible material. Wet powder to prevent dust dispersion if needed.

SECTION 6: Accidental Release Measures

- **Personal Precautions:** Wear dust mask and gloves for large spills to avoid dust inhalation; no special PPE for small spills.
- **Environmental Precautions:** No restrictions; material is biodegradable and safe for soil/water in any quantity.
- **Clean-up:** Small spills: Sweep or wipe up with dry cloth, transfer to sealed container for reuse/disposal. Large spills: Wet powder to prevent dust dispersion, sweep into sealed drums; avoid direct discharge to drains (no harm, but for product recovery).
- **Reference to Other Sections:** For waste disposal, see Section 13.

SECTION 7: Handling and Storage

7.1 Precautions for Safe Handling

- Handle in a well-ventilated area; avoid generating excessive dust (minimize pouring/agitation).
- Use dry equipment for handling to prevent caking; avoid contact with moisture/humidity.
- Hygiene Measures: Wash hands thoroughly with water after handling; no restrictions on eating/drinking in the workplace (maintain basic hygiene).

7.2 Conditions for Safe Storage

- **Storage Temperature:** 5-25°C, cool and dry warehouse.
- **Humidity Control:** Relative humidity ≤60%; store in sealed packaging to prevent moisture absorption and caking.
- **Protection:** Avoid direct sunlight, high temperature (>30°C) and damp environment.
- **Incompatibilities:** Strong oxidizing agents (may cause mild degradation of oligosaccharides); no incompatibility with common food/feed ingredients.

- **Shelf Life:** 24 months (unopened, under specified storage conditions).

SECTION 8: Exposure Controls/Personal Protection

8.1 Control Parameters

No occupational exposure limits required; product is a food-grade ingredient with GRAS status.

8.2 Exposure Controls

- **Engineering Controls:** Basic general ventilation is sufficient; local exhaust ventilation optional for large-scale bulk handling (to reduce dust).
- **Personal Protective Equipment (PPE):**
 - **Eye/Face:** Safety glasses recommended for bulk handling to prevent powder from entering eyes.
 - **Skin:** Nitrile/latex gloves for hygiene purposes; no mandatory skin protection.
 - **Respiratory:** Disposable dust mask for large spills/bulk handling (to avoid dust inhalation); not required for normal use.
 - **Other:** Lab coat/apron optional for industrial handling to prevent powder contamination of clothing.

8.3 Hygiene Measures

Provide hand wash facilities in the workplace; no special hygiene requirements beyond standard food processing practices.

SECTION 9: Physical and Chemical Properties

- **Physical State:** Free-flowing powder
- **Color:** White to off-white
- **Odor:** Mild characteristic sweet odor, no off-odor
- **Taste:** Mild sweet, clean taste
- **Flash Point:** >300°C (Non-flammable)
- **Autoignition Temperature:** Not applicable (non-flammable)
- **Melting Point/Decomposition Temperature:** >180°C (decomposition, no melting)
- **Bulk Density:** 0.60-0.75 g/cm³ (25°C)
- **Tap Density:** 0.70-0.85 g/cm³ (25°C)
- **Particle Size (D50):** 80-120 mesh
- **Solubility:** Freely soluble in water; insoluble in ethanol, ether, and organic solvents
- **pH Value:** 4.0-6.0 (5% aqueous solution, 25°C)
- **Moisture Content:** ≤8.0%
- **Hygroscopy:** Slightly hygroscopic (absorbs moisture in high humidity >70%)
- **Explosive Properties:** None
- **Oxidizing Properties:** None

SECTION 10: Stability and Reactivity

10.1 Chemical Stability

Stable under recommended storage/handling conditions (5-25°C, dry, sealed). Heat stable up to 121°C (30 mins autoclaving) for food processing; acid stable (pH 2.5-8.0).

10.2 Possibility of Hazardous Reactions

No hazardous polymerization, decomposition or violent reactions under normal use/storage conditions.

10.3 Conditions to Avoid

Prolonged exposure to high temperature (>180°C), high humidity (>70%), strong oxidizing agents, and direct sunlight.

10.4 Incompatible Materials

Concentrated nitric acid, high-concentration hydrogen peroxide, and strong oxidizing food additives (in large quantities).

10.5 Hazardous Decomposition Products

Complete combustion produces only carbon dioxide and water; no toxic/decomposed hazardous substances at normal processing temperatures.

SECTION 11: Toxicological Information

- **Acute Toxicity:** LD₅₀ (Oral, Rat) >20,000 mg/kg; LD₅₀ (Dermal, Rabbit) >20,000 mg/kg; Inhalation (Rat, LC₅₀) >50 mg/m³ (4-hour exposure) – Practically non-toxic.
- **Skin Corrosion/Irritation:** Non-irritating to skin (Rabbit 4-hour patch test).
- **Serious Eye Damage/Eye Irritation:** Slightly irritating (reversible) only if large powder quantities enter eyes; no permanent damage (Rabbit test).
- **Respiratory Irritation:** Mild temporary irritation if inhaled in heavy dust; no chronic respiratory effects.
- **Sensitization:** No skin/respiratory sensitization potential (no reported cases).
- **Carcinogenicity:** IARC Group 3 (Not classifiable); FDA GRAS status, no carcinogenic potential.
- **Reproductive Toxicity:** No adverse effects on fertility/fetal development in animal studies (oral exposure up to 5000 mg/kg/day).
- **Specific Target Organ Toxicity:** No target organ toxicity with normal consumption/handling.

SECTION 12: Ecological Information

- **Toxicity:** Non-toxic to aquatic/terrestrial organisms – Fish (Zebrafish, LC₅₀) >5000 mg/L (96h); Daphnia (EC₅₀) >2000 mg/L (48h); Algae (EC₅₀) >5000 mg/L (72h); Soil microbes (no inhibitory effect).
- **Persistence and Degradability:** Readily biodegradable (>90% in 28 days) by microorganisms in water/soil; no environmental persistence.
- **Bioaccumulative Potential:** None (water-soluble carbohydrate, no lipophilicity, BCF <10).
- **Mobility in Soil:** High mobility (water-soluble) but rapidly degraded by soil microbes; no soil accumulation/leaching risk.
- **PBT/vPvB Assessment:** Not classified as PBT/vPvB (meets biodegradability, low toxicity and no bioaccumulation criteria).
- **Other Adverse Effects:** No eutrophication risk (no nitrogen/phosphorus components); no adverse effects on the environment.

SECTION 13: Disposal Considerations

- **Product Waste:** Dispose of as non-hazardous food/feed waste. Can be directly discharged to soil/water (biodegradable) or sent to municipal solid waste treatment facilities; no special disposal requirements.
- **Packaging Waste:** Rinse empty packaging with water to remove residual powder, then dispose of as recyclable waste (plastic/ paper) or non-hazardous solid waste.
- **Spilled Waste:** Collected spilled powder can be reused if not contaminated; contaminated powder is disposed of as non-hazardous waste.

SECTION 14: Transport Information

- **UN Number:** ADR/RID: -; IMDG: -; IATA-DGR: - (Not dangerous goods)
- **UN Proper Shipping Name:** ADR/RID: Not dangerous goods; IMDG: Not dangerous goods; IATA-DGR: Not dangerous goods
- **Transport Hazard Class(es):** ADR/RID: -; IMDG: -; IATA-DGR: -
- **Packaging Group:** ADR/RID: -; IMDG: -; IATA-DGR: -
- **Marine Pollutant:** No (IMDG Code)
- **Special Precautions for User:**
 - Transport as food-grade cargo; use sealed, moisture-proof packaging to prevent caking and contamination.

- Avoid transport in damp, high-temperature (>30°C) or direct sunlight conditions; transport in dry, cool vehicles.
- Avoid mixing with strong oxidizing agents, hazardous chemicals and damp materials during transport.
- No special transport documentation required (non-dangerous goods).

SECTION 15: Regulatory Information

- **China:** Compliant with GB 2760-2021 (Food Additive), GB/T 23532 (Xylo-oligosaccharides National Standard); approved as prebiotic food/feed additive; SC/QS certified.
- **US:** FDA GRAS (GRN No.173); listed in TSCA Inventory; compliant with 21 CFR for food/dietary supplement use; Kosher certified.
- **EU:** REACH Registered (exempt for food ingredients); compliant with EU Novel Food Regulation and EC 1333/2008 (Food Additives); Halal certified.
- **International:** Compliant with Codex Alimentarius standards for carbohydrate food ingredients; no international regulatory restrictions.

SECTION 16: Other Information

- **Further Information:** This product is a natural high-efficiency prebiotic that selectively promotes the growth of beneficial gut bacteria (Bifidobacteria, Lactobacilli) with no digestion by human/animal digestive enzymes.
- **Revision Note:** First issue of MSDS for Xylo-Oligosaccharide 50% (Powder) (CAS 87-89-8)
- **Disclaimer:** This MSDS is based on current scientific and regulatory data, complying with GB/T 16483, GB/T 17519, GHS, IMDG and IATA standards. The supplier is not liable for damage caused by improper use, contamination or non-compliance with storage/handling precautions.
- **Contact for Further Info:** NEWAY SINOPHC TECH. LIMITED, Tel: +86-021-50350029 (24h technical support).