

Hydrolyzed Bovine Collagen

HydroCollix[™] Bovine | Safety Data Sheet

1. Identification

Product / Other names	Hydrolyzed Bovine Collagen; hydrolyzed bovine collagen peptide powder; HydroCollix [™] Bovine.
CAS No.	9007-34-5
Recommended uses / Restrictions	Ingredient for food, beverage and nutrition formulations. Medical, diagnostic, pharmaceutical or sterile uses require separate application qualification.
Supplier	Hainan Zhongxin Chemical Co., Ltd. (ZXCHEM)
Manufacturer	Jiangxi Hanfei Biotechnology Co., Ltd., Shangrao, Jiangxi, China.
Shanghai office	Room 1001, Building A, Caohejing Center, No. 1520 Gumei Road, Xuhui District, Shanghai, China.
Telephone / Email	+86-21-54265599 / sales@zxchem.com.cn
Website	www.zxchem.com
Emergency / Supplier contact	+86-21-54265599 (supplier contact during office hours, China time). For urgent medical treatment outside office hours, contact local emergency services or a poison centre.

2. Hazard Identification

GHS classification	Not classified as hazardous based on available information for the unmodified collagen peptide powder.
Label elements	No GHS hazard pictogram, signal word or hazard statement assigned.
Other hazards	Dust may cause mechanical irritation to eyes and respiratory passages. Fine organic powder dispersed in air may form a combustible dust atmosphere near ignition sources. Wet powder may make floors slippery. Persons with known sensitivity to bovine proteins should avoid exposure.
Precautions	Avoid breathing airborne dust. Provide ventilation, protect eyes, minimise dust deposits and keep powder-handling areas away from ignition sources.

3. Composition / Information on Ingredients

Principal ingredient	Hydrolyzed collagen derived from bovine skin (bovine collagen peptides). CAS 9007-34-5.
Composition	Proteinaceous peptide powder with naturally occurring moisture, mineral ash and residual fat and carbohydrates. No hazardous added component has been identified.
Ingredient content	Collagen hydrolysate is the principal ingredient. A chemical-purity percentage is not assigned from nutritional protein calculations.
Molecular formula / Molecular weight	A peptide distribution has no single molecular formula or molar mass. Mean peptide molecular weight: below 3,000 Da.

4. First-Aid Measures

Inhalation	Move to clean air and rest. Seek medical advice if coughing, wheezing or discomfort persists. Breathing difficulty or collapse requires immediate medical assistance.
Skin	Remove dusty clothing and wash exposed skin with water and mild soap. Seek medical advice if irritation or an allergic reaction continues.
Eyes	Rinse gently with clean water for at least 15 minutes. Remove contact lenses if easy to do. Seek medical attention if discomfort or redness continues.
Ingestion	Rinse the mouth. Do not induce vomiting. Give nothing by mouth to an unconscious person. Seek medical advice for unusual symptoms, significant accidental ingestion or a suspected allergic reaction.
Symptoms / Medical care	Mechanical irritation of eyes, skin or airways may occur during dusty handling. Treat symptoms and provide the product and batch identification to the clinician.

5. Fire-Fighting Measures

Extinguishing media	Use water spray, dry powder, carbon dioxide or suitable foam, selected for the surrounding fire. Avoid a forceful jet that disperses powder deposits.
Specific hazards	Fine organic dust dispersed in air can burn and may explode near an ignition source. Dust-explosion severity, minimum ignition energy and ignition temperature are not determined.
Combustion products / Protection	Fire may produce carbon monoxide, carbon dioxide, nitrogen oxides and irritating smoke. Firefighters should wear self-contained breathing apparatus and suitable protective equipment. Isolate the area and prevent contaminated firefighting water entering drains.

6. Accidental Release Measures

Personal precautions	Restrict access, ventilate and minimise dust generation. Remove ignition sources if safe. Use eye protection and a suitable particulate respirator if dust cannot be controlled.
Environmental precautions	Prevent bulk powder entering drains, surface water or food-production areas. Large releases can add organic loading to water. Follow applicable spill reporting requirements.
Containment / Cleanup	Collect carefully using suitable dust-controlled equipment, or gently sweep into closed, labelled containers. Use equipment suitable for combustible-dust conditions when applicable. Avoid compressed-air cleaning. Clean wet residues promptly to prevent slipping. Dispose of collected material according to Section 13.

7. Handling and Storage

Safe handling	Use local extraction where dust is generated. Avoid inhaling powder and unnecessary skin or eye contact. Control static and ignition sources in dusty operations. Keep equipment clean and protect food ingredients from odours and contamination.
Hygiene	Wash hands after handling. Do not eat, smoke or drink in powder-handling areas. Remove soiled clothing and follow site hygiene procedures.
Storage conditions	Store in a cool, dry place away from direct sunlight. Keep sealed at ambient temperature below 25°C. Use original food-suitable packaging and keep the PE inner liner closed. Shelf life: two years in unopened original packaging.
Incompatibilities / Specific uses	Keep away from strong oxidants and substances that may contaminate food ingredients. Follow grade, batch and formulation requirements.

8. Exposure Controls / Personal Protection

Control parameters	No substance-specific occupational exposure limit is listed. Apply locally applicable inhalable and respirable dust limits.
Engineering controls	Provide ventilation or local exhaust at tipping, mixing and milling points. Assess airborne dust and combustible-dust risks for the process. Provide accessible eyewash facilities.
Eyes / Hands / Clothing	Wear safety glasses with side shields or goggles during dusty operations. Use suitable gloves and clean protective clothing according to the workplace exposure assessment.
Respiratory protection	Use an approved particulate respirator selected and fitted under the local respiratory-protection programme when ventilation cannot adequately control dust.
Thermal / Environmental controls	Special thermal PPE is not normally required for ambient handling. Prevent bulk powder discharge to drains; maintain housekeeping and waste controls.

9. Physical and Chemical Properties

Physical state / Colour	Solid powder / Off white.
Odour / Odour threshold	Mild characteristic odour; quantitative odour threshold not determined.
Particle characteristics	≥95% below 0.35 mm. Respirable dust fraction not determined.
Water solubility	Soluble in water. Dissolution depends on concentration, temperature and mixing.
Mean molecular weight	Below 3,000 Da.
pH (typical reference range)	5.0-7.5, 10% aqueous solution. General collagen peptide reference range; not a batch test result or guaranteed specification.
Bulk density (typical reference range)	0.3-0.5 g/mL, as packed. General collagen hydrolysate reference range; not a batch test result or guaranteed specification.
Relative density	Not determined. Bulk density is reported separately above.
Melting / Freezing / Boiling	No single melting or boiling point applies to this commercial peptide powder; thermal transition data not determined.
Flash point / Flammability	Flash point: not applicable to the solid as supplied. Organic powder can burn; avoid dust clouds and ignition sources.
Auto-ignition / Decomposition / Limits	Auto-ignition and decomposition temperatures, upper/lower explosive limits and dust-explosion parameters: not determined.
Vapour pressure / Vapour density	Not applicable to the non-volatile powder under normal ambient handling. Exposure occurs principally as dust.
Viscosity / Partition coefficient	Kinematic viscosity: not applicable to a solid powder. Solution viscosity and n-octanol/water partition coefficient: not determined.
Oxidising / Explosive properties	No oxidising hazard identified. Airborne organic dust may be combustible; no measured dust-explosion classification assigned.

10. Stability and Reactivity

Reactivity / Chemical stability	Stable under recommended storage and normal ambient handling. No hazardous reactivity is known under these conditions.
Hazardous reactions	No hazardous polymerisation is known. Dust dispersed near an ignition source may ignite or explode.
Conditions to avoid	Excessive heat, ignition sources, airborne dust, prolonged humid storage and wet contamination.
Incompatible materials / Decomposition	Strong oxidants. Severe heating or combustion may generate carbon monoxide, carbon dioxide, nitrogen oxides and irritating smoke.

11. Toxicological Information

Exposure routes / Symptoms	Exposure may occur through dust inhalation, eye or skin contact and accidental ingestion. Mechanical irritation is possible; sensitivity varies between individuals.
Acute toxicity	Product-specific oral, dermal and inhalation LD50/LC50 data: not available.
Skin / Eyes / Sensitisation	Dust may irritate skin, eyes and airways. Persons with known sensitivity to bovine proteins should avoid exposure. Product-specific sensitisation test data: not available.
Mutagenicity / Carcinogenicity	Product-specific germ-cell mutagenicity and carcinogenicity studies: not available. No classification assigned on the available information.
Reproductive toxicity / STOT	Product-specific reproductive toxicity and specific target-organ toxicity data for single or repeated exposure: not available.
Aspiration / Endocrine / Other effects	Aspiration hazard classification is not applicable to the solid form as supplied. Endocrine-disruption and delayed-effect data: not available.

12. Ecological Information

Ecotoxicity	Product-specific aquatic LC50/EC50, algal and microbial toxicity data: not available. Prevent uncontrolled bulk release.
Persistence / Degradability	Proteinaceous material is expected to biodegrade. Large releases may affect water quality through organic loading. Quantitative degradation data: not available.
Bioaccumulation / Mobility	Measured bioconcentration, partition and soil-mobility data: not available.
PBT / vPvB / Endocrine / Other effects	Product-specific persistent, bioaccumulative and toxic (PBT), very persistent and very bioaccumulative (vPvB) and ecological endocrine assessments: not available.

13. Disposal Considerations

Product waste	Use an authorised waste-disposal route under local requirements. Classify waste according to its condition and contamination. Do not discharge bulk powder into drains.
Packaging	Empty bags and liners without raising dust. Recycle clean packaging where accepted. Dispose of contaminated packaging according to the same waste assessment. Do not reuse packaging for food without appropriate hygiene control.

14. Transport Information

UN number / Proper shipping name	Not assigned for the unmodified dry collagen peptide powder.
Transport hazard class / Packing group	Not assigned.
Road / Rail / Sea / Air	Not classified as dangerous goods on available information for the product as supplied. Follow applicable road/rail, IMDG and IATA requirements and carrier instructions.
Environmental hazards	No marine-pollutant classification identified.
Special precautions	Keep packaging dry, sealed and protected from heat and contamination. Avoid dust release during loading and unloading.
Maritime bulk transport	Not applicable: supplied as packaged solid powder.

15. Regulatory Information

Safety / Health / Environmental rules	This sheet follows the 16-section SDS format. Apply relevant chemical, food, occupational safety and environmental requirements in the destination jurisdiction.
Chemical identification / Inventories	CAS No. 9007-34-5. Registration, inventory and import requirements depend on the destination and the supplied composition; use the order documentation for regulatory filings.
Registration considerations	Registration obligations or polymer-related exemptions must be assessed under the applicable jurisdiction. This SDS is not a registration certificate.
Food / Certification information	Observe applicable food-ingredient use, destination labelling and bovine-origin traceability requirements. Product documentation includes ISO 9001, ISO 22000, HACCP, KOSHER, FSSC 22000, GMP and HALAL certificates where applicable.
Chemical safety assessment	A formal chemical safety assessment is not available.

16. Other Information

Revision / Supplier	Revision 2026.4; 1 October 2026. Hainan Zhongxin Chemical Co., Ltd. (ZXCHEM).
Revision information	Updated the document header with the official ZXCHEM reversed logo and removed the header calendar date. Product specifications and safety information are unchanged.
Property information	Typical pH and bulk-density ranges in Section 9 are reference properties for formulation guidance. They are not measured batch values or contractual product specifications. Use the batch COA and agreed specification for acceptance.
Training	Train personnel in safe powder handling, dust control, spill cleanup, ignition prevention, PPE and emergency procedures. Assess the actual process before scale-up.
Abbreviations	CAS: Chemical Abstracts Service; GHS: Globally Harmonized System; COA: certificate of analysis; LD50/LC50/EC50: median lethal/effect dose or concentration; STOT: specific target-organ toxicity; PPE: personal protective equipment; PBT/vPvB: persistent/bioaccumulative/toxic and very persistent/very bioaccumulative; IMDG/IATA: sea/air transport frameworks.
Use of information	This SDS describes the unmodified product as supplied. Blends, additives, processing or contamination may change its hazards. The information supports safe handling and does not guarantee fitness for a particular application, regulatory approval or finished-product health claims.
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