Material Safety Data Sheet

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Copper Tripeptide-1 / GHK-Cu
Chemical Name: Glycyl-L-Histidyl-L-Lysine Copper Complex
INCI Name: Copper Tripeptide-1
CAS Number: 89030-95-5
Molecular Formula: $C_{14}H_{22}CuN_6O_4 \cdot x\ HCl$
Product Form: Crystalline Powder
Colour: Bluish to Bluish-Purple
Recommended Use: Cosmetic Raw Material
Supplier: Botanic Planet Canada Inc.
Address: 2 Bram Crt Unit # 3-4 Brampton, Ontario, Canada
Telephone number: 905-455-4444
Emergency phone number (613)-996-6666 CANUTEC 24 HOUR EMERGENCY

SECTION 2: HAZARDS IDENTIFICATION

GHS Classification: The supplied SDS describes this product as not classified as hazardous under GHS. However, it also lists irritation hazard statements.

Potential Hazards:

- Skin Contact: Concentrated powder may cause mild irritation.
- Eye Contact: Direct contact may cause irritation.
- Inhalation: Airborne powder may irritate the respiratory tract.
- Ingestion: Not intended for consumption.
- Flammability: Described by the supplier as a non-flammable solid.

Precautionary Measures:

- Avoid breathing dust.
- Avoid direct contact with eyes.
- Wear protective gloves and safety goggles.
- Wash hands thoroughly after handling.
- Use in a well-ventilated area.

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient	CAS Number	Concentration
Copper Tripeptide-1 (GHK-Cu)	89030-95-5	Purity 99.35%
Water Content	—	6.30%
Chloride Content	—	7.7%

Note: Purity, water, and chloride are separate analytical measurements and must not be added together as formulation percentages. The supplied batch COA reports GHK content of 73.52% and copper content of 12.6%.

SECTION 4: FIRST-AID MEASURES

Eye Contact: Immediately rinse eyes with plenty of clean water for at least 15 minutes. Remove contact lenses if present and easy to do. Seek medical attention if irritation persists.

Skin Contact: Wash affected skin thoroughly with soap and water. Remove contaminated clothing. Seek medical attention if irritation develops.

Inhalation: Move the affected person to fresh air. Seek medical attention if coughing, breathing difficulty, or irritation persists.

Ingestion: Rinse mouth thoroughly with water. Do not induce vomiting. Seek medical advice if symptoms occur or a significant quantity has been swallowed.

SECTION 5: FIRE-FIGHTING MEASURES

Flammability: Supplier describes the product as non-flammable under normal conditions.

Suitable Extinguishing Media:

- Water spray
- Carbon dioxide (CO_2)
- Dry chemical powder
- Foam

Hazardous Combustion Products: Thermal decomposition may produce nitrogen oxides and copper-containing fumes.

Protective Equipment: Firefighters should wear appropriate protective clothing and self-contained breathing apparatus when necessary.

Avoid using high-pressure water jets that may disperse powder.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions:

- Avoid generating airborne dust.
- Wear protective gloves, goggles, and appropriate respiratory protection.

- Ensure adequate ventilation.

Cleanup Procedures:

- Carefully collect spilled powder using methods that minimize dust.
- Transfer material into a suitable sealed container.
- Clean the affected surface with water after collecting the powder.
- Dispose of contaminated materials according to applicable regulations.

Environmental Precautions: Prevent large quantities from entering drains, sewers, and natural waterways.

SECTION 7: HANDLING AND STORAGE

Handling:

- Handle in a clean, well-ventilated environment.
- Avoid inhalation of powder.
- Avoid contact with eyes and skin.
- Do not eat, drink, or smoke while handling.
- Keep containers tightly closed after use.

Storage Conditions:

- Recommended storage temperature: 2–8°C.
- Store in a cool, dry environment.
- Protect from direct sunlight, heat, and moisture.
- Keep away from strong oxidizing agents, strong acids, and strong alkalis.
- Store in tightly sealed, light-resistant packaging.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational Exposure Limits: No specific occupational exposure limit was provided for Copper Tripeptide-1.

Engineering Controls: Provide adequate ventilation and local exhaust ventilation when handling powders.

Personal Protective Equipment:

Protection	Recommendation
Eye Protection	Safety goggles
Hand Protection	Nitrile protective gloves
Respiratory Protection	Suitable particulate respirator when dust exposure is possible
Skin Protection	Laboratory coat or protective clothing

Hygiene	Wash hands after handling

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Property	Description
Physical State	Solid
Appearance	Bluish to bluish-purple crystalline powder
Odour	Odourless or slight characteristic odour
Solubility	Easily soluble in water
pH (1 mg/mL)	5.9
Purity	99.35%
GHK Content	73.52%
Copper Content	12.6%
Water Content	6.30%
Chloride Content	7.7%
Melting Point	Decomposes before melting (supplier SDS)
Flash Point	Not applicable to the solid under supplier-described conditions
Bulk Density	Approximately 0.35–0.55 g/cm³ (supplier SDS)

SECTION 10: STABILITY AND REACTIVITY

Chemical Stability: Stable under recommended storage and handling conditions.

Conditions to Avoid:

- Excessive heat
- Direct sunlight
- Moisture
- Strongly acidic or alkaline conditions

Incompatible Materials:

- Strong oxidizing agents
- Concentrated strong acids
- Strong alkalis

Hazardous Decomposition Products: Nitrogen oxides and copper oxide fumes may form during high-temperature decomposition.

Hazardous Polymerization: Not expected under normal handling conditions.

SECTION 11: TOXICOLOGICAL INFORMATION

Acute Toxicity: The supplied SDS reports an oral LD_{50} in rats greater than 2,000 mg/kg. The underlying study report was not included.

Skin Irritation: Concentrated powder may cause mild irritation.

Eye Irritation: Direct powder contact may cause temporary irritation.

Inhalation: Dust may cause respiratory irritation.

Sensitization: No conclusive information provided.

Carcinogenicity: Insufficient data provided to determine classification.

Mutagenicity: Insufficient data provided to determine classification.

Reproductive Toxicity: Insufficient data provided.

Chronic Toxicity: No detailed chronic toxicity studies were included in the supplied SDS.

Important: The absence of available toxicological data should not be interpreted as proof that the substance is non-toxic.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity: Limited experimental data available.

Biodegradability: The supplier describes the peptide component as biodegradable; supporting test data were not supplied.

Bioaccumulation: No verified quantitative data provided.

Environmental Precautions: Avoid uncontrolled release into waterways and the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

- Dispose of product waste according to applicable municipal, provincial, and federal regulations.
- Avoid releasing concentrated powder into drains or natural waterways.
- Dispose of contaminated packaging according to local requirements.
- Do not reuse contaminated packaging for food or drinking water.

SECTION 14: TRANSPORT INFORMATION

Transport Information	Classification
UN Number	Not assigned in supplied SDS
Proper Shipping Name	Not regulated as dangerous goods according to supplier SDS
Transport Hazard Class	Not applicable
Packing Group	Not applicable

Marine Pollutant	Not established
Special Precautions	Protect from moisture, heat, and direct sunlight

Transportation: Supplier identifies the material as non-dangerous goods for normal transportation. Final classification should be confirmed for the applicable transportation mode and jurisdiction.

SECTION 15: REGULATORY INFORMATION

Product Category: Cosmetic Raw Material.

Canada: Applicable WHMIS, Hazardous Products Regulations, and cosmetic regulatory requirements should be assessed for the intended supply and use.

United States: Cosmetic ingredient use is subject to applicable FDA requirements.

European Union: Cosmetic use is subject to Regulation (EC) No. 1223/2009 and applicable restrictions.

Regulatory Note: Ingredient identification or listing in a cosmetic ingredient database does not constitute regulatory approval of a finished cosmetic product.

SECTION 16: OTHER INFORMATION

Product: Copper Tripeptide-1 (GHK-Cu)

Prepared For: Botanic Planet Canada Inc.

Document Type: Material Safety Data Sheet / Safety Data Sheet

Intended Use: Cosmetic Raw Material

This product is a 100% pure and natural. It does not contain any artificial ingredients or adulteration of any kind to the best of our knowledge and specifications. The analysis and statements herein constitute the most complete information available to Botanic Planet Canada Inc. Please refer to all relevant technical information specific to the product, prior to use. This information contained in this material safety Data sheet is obtained from current and reliable sources. As an ordinary or otherwise user(s) of this product is outside the control of Botanic Planet Canada Inc., no representation or warranty, expressed or implied is made as to the effect(s) of such use (s) (including damages or injury) or any obtained. Botanic Planet Canada Inc. expressly disclaims responsibility as to the ordinary or otherwise uses. Furthermore, Botanic Planet Canada Inc. makes no claims as to the fitness for any use, and you should consider nothing container herein as a recommendation. The Liability of botanic Planet Canada Inc. is limited to the value of the goods and does not include any consequential loss. In the event of any dispute, the Customer hereby agrees that Jurisdiction is limited to the province of Ontario Canada.