



Certificate of Analysis

GHK-Cu Acetate

Product Name : GHK-Cu Acetate	Lot No. : DL8198
Mfg. Date : May 11, 2024	Exp. Date : May 10, 2027
MF : C ₁₄ H ₂₂ CuN ₆ O ₄ .xHAc	MW : 463.98
CAS No. : 130120-57-9	Batch Qty : 2360 g
Sequence : Gly-His-Lys-Cu.xHAc	

TESTS	SPECIFICATIONS	RESULTS
Appearance	Blue powder	Blue Powder
Solubility	Soluble in water	Complies
Identification (MS)	340.5 ± 1.0	341.2
Amino Acid Composition (AAA)	Gly	0.9 – 1.1
	His	0.9 – 1.1
	Lys	0.9 – 1.1
Acetic Acid Content (HPLC)	≤ 15.0 %	8.80%
Water Content (KF)	≤ 10.0 %	4.20%
Bacterial Tests (USP2022)	Total Aerobic Bacterial Count	≤ 10 ² CFU/g
	Total Mold and Yeast Count	≤ 10 ² CFU/g
	<i>E. coli</i>	Absent
Bacterial Endotoxins (USP2022)	≤ 10 EU/mg	< 10 EU/mg
Copper Content (HPLC)	≤ 16.0 %	12.5%
Peptide Content (N%)	≥ 70.0%	74.5%
Peptide Purity (HPLC) (CP2020)	≥ 98.0%	99.8%
Related Substances (HPLC)	Total Impurities	≤ 2.00%
	Any Single Impurity	≤ 1.00%
Conclusion: The product is a synthetic peptide and meets the In-House specifications. Long Term Storage: Store in a sealed container at 2°C - 8°C in the fridge or in the freezer. Distributed by Darmerica.		

Note: Analytical results transcribed from original COA provided by Chengdu Weihuitai Pharmaceutical Technology Co. Ltd. (China); Lot: WHT-31/20240511/03.

Based on the review of above information, the lot stands released.

	Name	Title	Signature	Date
Prepared by	Kamlesh Mistry	Quality Manager		06/21/2024
Released by	Pietro Pazzetti	Quality Assistant		06/21/2024



SAFETY DATA SHEET

SECTION 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Tripeptide-1 (GHK-Cu) Acetate

CAS#: 130120-57-9

Supplier:

Darmerica
4380 Oakes Road, Unit 800
Davie, FL 33314, USA
Tel: (954) 530-6597

SECTION 2 – INGREDIENT INFORMATION

Name: Tripeptide-1 (GHK-Cu) Acetate

Purity: ≥ 95.0%

SECTION 3 – HAZARDS IDENTIFICATION

Personal Protection: Wear suitable protective clothing, gloves and eye/face protection

SECTION 4 – FIRST AID MEASURES

Skin Contact: Wash with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes and wash before wearing. In case of eye contact, flush with copious amounts of water for at least 15 minutes.

Inhalation: Remove to fresh air and monitor breathing. If breathing becomes difficult, give oxygen. If breathing stops, give artificial respiration and contact emergency service.

Ingestion: If swallowed, rinse mouth with water, contact local poison center and call a physician

SECTION 5 – FIRE AND EXPLOSION DATA

Fire Extinguishing Media: Material is non-combustible. Use extinguishing media appropriate to surrounding fire conditions.

Fire and Explosion Hazards: May emit toxic gases upon thermal decomposition

Fire Fighting: As with all fires, evacuate personnel to a safe area. Firefighters should use self-contained breathing equipment and protective clothing

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Spill Response: Wear appropriate protective clothing. Cover spillage with suitable absorbent material. Using non-spark tools, sweep up material and place in an appropriate container. Decontaminate spill site with 10% caustic solution and ventilate area until after disposal is complete. Hold all material for appropriate disposal as described under DISPOSAL CONDITIONS.

SECTION 7 – HANDLING AND STORAGE

Handling: Use in a chemical fume hood, with air supplied by an independent system. Avoid inhalation, contact with eyes, skin and clothing. Avoid prolonged or repeated exposure.

Storage: Store in a sealed container.

SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

Personal protective equipment

Respiratory protection Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Eye protection Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin and body protection Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Hygiene measures General industrial hygiene practice.

Specific engineering controls Use mechanical exhaust or laboratory fumehood to avoid exposure

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

N/A

SECTION 10 – STABILITY AND REACTIVITY

Stability: Stable under recommended storage condition

SECTION 11 – TOXICOLOGICAL INFORMATION

Product has high safety coefficient. It belongs to actual non-toxicity materials, tested by acute toxicity experiments

SECTION 12 – ECOLOGICAL INFORMATION

No ecological problems expected, if product is handled and used with care and attention.

SECTION 13 – DISPOSAL CONSIDERATIONS

Dissolve or mix material with a suitable combustible solvent and incinerate in a chemical incinerator equipped with an afterburner and scrubber. Material should be disposed of in keeping with all local and national legislation. Packaging should be disposed of in keeping with all local and national legislation. Handle contaminated containers as product.

SECTION 14 – TRANSPORT INFORMATION

Transport as per local, state and federal regulations.

SECTION 15 – OTHER REGULATORY INFORMATION

The format refers to MSDS requirements ANSI (American National Standards Institute) and International Standards Organization (ISO).

SECTION 16 – OTHER INFORMATION

Created: May 2017

Last Modified: January 2021

Important Notice:

The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Darmerica shall not be liable for any damages resulting from handling or from contact with the above product.