



MOBEL BIOMATERIALS TECHNOLOGY CO.,LIMITED

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Copper Tripeptide-1

Product Information

INCI name:	Copper tripeptide-1
CAS No.:	89030-95-5
Peptide Sequence:	GHK-Cu
Molecular Formula:	$C_{28}H_{46}N_{12}O_8Cu$
Molecular weight:	742.3
Trade name:	Copper tripeptide-1
Specification:	98.0% Min
Appearance:	White Powder
Application:	Cosmetics - skin renewal, hair growth, wound healing
Packaging:	Bottle
Filling Quantity:	1 g / bottle 10 g / bottle 100 g / bottle 1000 g / bottle special packaging upon request
Shelf life:	Up to 2 years, not open
Storage conditions:	Dry and cool Avoid direct sunlight and heat

Copper Tripeptide-1

Product Datas

Parameter	Specifications
Appearance	blue to purple powder
Identity	340.5 ±1
Solution	> 100 mg/ml (H ₂ O)
Amino acids composition	± 10 % of theoretical
Peptide purity (HPLC)	≥ 95.0 % by area integration
Water content (K. Fischer)	≤ 8.0 %
Acetate content	≤ 15.0 %
Copper content	8 ~ 12 %
PH (1% water solution)	5.0 - 8.0

Characteristics:

Copper is an important trace element that has been found to be important in wound healing and enzymatic processes. Lysyloxidase is an important enzyme in collagen and elastin production and it is dependent upon the action of copper. Tyrosinase and cytochrome c oxidase require copper as well. The detrimental effects of free radicals on the skin have been elucidated in basic science research info skin photo-aging. Super-oxide dismutase acts as an important antioxidant and requires copper as a cofactor. The peptide GHK spontaneously complexes with copper and facilitates the uptake of copper by cells. This peptide sequence is found in proteins of the extracellular matrix such as the α -chain of collagen, and it is believed to be released during wounding and inflammation. A feedback stimulation of collagen repair has also been proposed for this peptide, but the main benefit to photo-aged skin is believed to be the enhanced delivery of copper.

Use level: 0.05—0.5 %

Cosmetic benefits:

1. Regenerate new collagen and elastin which improve skin firmness and elasticity
2. Increase the production of water-holding glycosaminoglycans which are true moisturization
3. Improve the skin's blood vessel microcirculation, help hair growth