GfN

Naturally active.

Omega-CTP-Active PHE

Description

Omega-CTP-Active PHE contains a mixture of amino acids, free radical scavengers and peptides, entirely of plant or synthetic origin. Omega-CTP-Active PHE increases the cell metabolism and as a potent anti-oxidant it protects the skin from radicals. It is not only regenerating and protecting the skin, but it is also increasing hydration and is taking care about the water balance of the skin.

Appearance

clear, slight yellow solution with a typical odor

INCI

Aqua, Glycerin, Arginine, Panthenol, Proline, Sorbitol, Glycine, Hydrolyzed Soy Protein, Bis(Tripeptide-1) Copper Acetate

Registration

	CAS-No.	EINECS-No.
Aqua	7732-18-5	231-791-2
Glycerin	56-81-5	200-289-5
Arginine	74-79-3	200-811-1
Panthenol	81-13-0	201-327-3
Proline	147-85-3	205-702-2
Sorbitol	50-70-4	200-061-5
Glycine	56-40-6	200-272-2
Hydrolyzed Soy Protein	68607-88-5	271-770-5
Bis(Tripeptide-1) Copper Acetate	130120-57-9	open

Preservatives

Phenoxyethanol.....1 %

Stabilizers

none

Efficacy

- moisturizing efficacy: Application of 3 % Omega-CTP-Active PHE showed an enhancement of skin hydration of 7.4 % compared to placebo after 4 weeks.
- cell viability: Application of 3 % Omega-CTP-Active PHE showed an enhancement of viability of 8.27 % after 48h compared to reference (100 % viability, PBS) and after 72h viability was even enhanced by 27.69 %.
- cell proliferation: Application of 3 % Omega-CTP-Active PHE showed a significant enhancement in cell proliferation of 12.77 % after 96h compared to untreated control.
- anti-oxidative potential: Application of Omega-CTP-Active PHE showed a dose depending reduction of oxidative cell stress:
  0.5 % -> 29.58 %
  1.0 % -> 33.68 %
  2.0 % -> 42.95 %
  up to 3.0 % -> 56.83 %
  compared to untreated ROS induced positive control.
- regulating water balance of the skin
- influencing epidermal barrier function
- regeneration of skin (increase of cell metabolism i.e. collagen production)
- skin remodelling

Please have a look at our Leaflet_2999_Efficacy_e for more details.

Characteristics

water content .....35 - 45 %
density at 20°C.....1.08 - 1.24 g/ml
pH-value.....5.5 - 7.0
nitrogen.....5.5 - 6.5 %
amino acids.....21.5 % (+/- 0.1 %)
metabolic activity.....40 - 60 %
determination of hydroxyl radicals.....50 - 65 %
scavenging properties (use 1 %)

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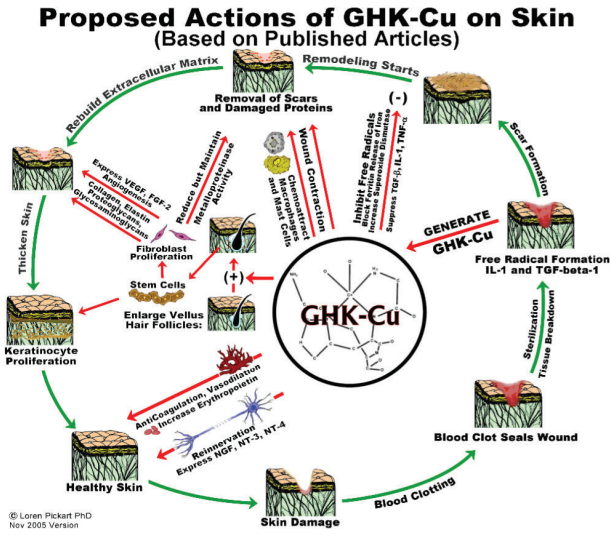
Application

Omega-CTP-Active is a water soluble radical scavenger to protect the aqueous phase of the skin from environmental impact. It is containing a number of radical scavengers and quenchers, whereby the copper tripeptide, mimics the superoxide dismutase activity.
Copper tripeptide is a multifunctional component, which is naturally present in the body (signal and carrier peptide) and is responsible for stimulation of collagen synthesis, anti-inflammatory actions, accelerated wound healing and tissue repair. This is shown in the below graph, developped by Loren Pickart.



The skin remodelling properties of Copper tripeptide can even lead to scar and stretch mark removal.

The amino acids L-Arginine and L-Proline are important for the water balance of tissue. L-Arginine is metabolized to Ornithin and Urea in the skin and therefore determines the water binding capacity of stratum corneum. In addition L-Arginine is composing and sustaining the epidermal barrier function. By NO production Arginine is regulating hemo- and lymph vascular perfusion and is therefore responsible for the distribution of nutrients and fluids in the skin. L-Proline has the highest water binding capacity of all amino acids known and is a building stone of collagen. Formulations containing Arginine have been tested to have comparable efficacy like Urea containing preparations.

Nature needs no cosmetics,
but cosmetics need nature.

Omega-CTP-Active PHE is suitable for use in high quality cosmetic products like facial creams, facial masks, ampoules, body lotions, after-sun lotions, after shave products and especially for Anti-Ageing products.

Application Concentration

Skin Care Formulations.....……1.0 - 5.0 %

Incorporation

Omega-CTP-Active PHE is fully soluble in water. It should be blended into the water phase at max. 50°C.

Toxicology

Omega-CTP-Active PHE has been developed from Omega-CHS-Activator® by a careful combination of its original components, which has been tested adequately with regard to its toxicology. For this reason there was no need for any toxicological tests on animals in behalf of the new product.

Mutagenity (Ames-Test): Omega-CHS-Activator® shows no negative results in the Salmonella Typhimurium Reverse Mutation Assay.

Photo-allergic and photo-toxic effects: UVA exposed photo patch test with the product shows no photo-allergic or photo-toxic effects.

Storage & Shelf life

Omega-CTP-Active PHE should be stored in dark at 10°C - 25°C.
Shelf life is 60 months in closed original containers.

GfN Herstellung von Naturextrakten GmbH

Straßburg 16
69483 Wald-Michelbach / Germany
Telefon +49 6207 922 80
Telefax +49 6207 922 810
www.gfn-selco.de
info@gfn-selco.de