

Collaplex 1.0

Description

Collagen is the most abundant form of protein in our body. It serves primarily a structural role, and in humans it is the principal component of skin, nails, cartilage, tendons and ligaments. It is present in virtually every body organ and its importance from a biological perspective is reflected in the fact that collagens are quite similar across species.

As a structural protein, collagen is essential to creating the body's physical structure, and as an extracellular matrix it acts as a supporting framework over which our cells are arranged.

Collagen formulations have been used for health purposes for at least 800 years.

Collaplex 1.0 is a ropelike triple helix native collagen for use in high quality cosmetic products. Collaplex 1.0 contains some natural concomitant substances which are bound to the collagen as a result of the mild process of extraction from calves hides originated in Germany. Collaplex 1.0 belongs to high molecular collagen of highest value.



Appearance

opaque, viscous solution

INCI

Aqua, Soluble Collagen

Registration

CAS-No.:

Aqua.....7732-18-5

Soluble Collagen.....9007-34-5

EINECS/ELINCS-No.:

Aqua.....231-791-2

Soluble Collagen.....232-697-4

Preservatives

Phenoxyethanol.....0.288 %

Methylparaben.....0.064 %

Ethylparaben.....0.032 %

Propylparaben.....0.016 %

Stabilizers

Sodium citrate buffer.....1.0 %

Efficacy

As we mature, the body's production of collagen slows and this is believed to contribute to an "older" appearance. Oral and topical collagen formulations are thought to help alleviate these age-related skin changes.

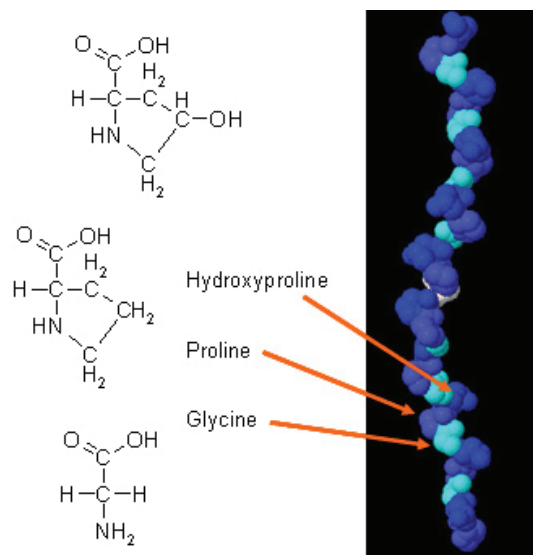
Collaplex 1.0 shows an outstanding high water absorption capacity. Over time, the powerful native and natural collagen helps to fill in lines and wrinkles, leaving your skin smooth and plump. In addition this outer film reduces the irritating and negative influences of environment on the skin.

A certain level of stratum corneum hydration is essential for skin smoothness and elasticity;

- moisturizing
- film forming
- water-retaining

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Chemical Structure



Incorporation

While all native collagen solutions are temperature sensitive and denature irreversible at temperatures between 38 - 45°C, we necessarily recommend to incorporate Collaplex 1.0 lower than 30°C in the water phase of your formulation.

Collaplex 1.0 existing on acidic pH as a result of added citric buffer.

For using it in After Shaves in combination with Alcohol and water, pH has to be positioned lower than four, otherwise Collaplex 1.0 will precipitate as fibrils. While using Collaplex 1.0 in water based ampules or fluids you have to add 2 % Sodium Chloride to slide the isoelectric point to the right direction and to avoid any precipitation after a long term.

Characteristics

collagen content.....	1.00 - 1.30 %
dry residue.....	2.00 - 2.50 %
acid value.....	5.50 - 7.00
pH value.....	3.50 - 4.00
ash as Na ₂ SO ₄	0.30 - 0.50 %
HVT-value.....	38-49°C
microbiology.....	<100 CFU / ml

Toxicology

non toxic
non irritating

Storage & Shelf life

Collaplex 1.0 should be stored in a dry and light protected place between 5 - 20°C.

In closed containers the shelf life is five years.

Application

Collaplex 1.0 is especially suitable and easy to formulate in caring facial cream and skin care formulations.

Other available qualities

Collaplex 1.0 PHE Mat.Code 1015
preserved with 1 % Phenoxyethanol

Application concentration

Skin Care Formulations.....	3.0 - 6.0 %
Body Lotions.....	0.5 - 3.0 %
After Shave.....	0.5 - 5.0 %
After Sun.....	0.2 - 5.0 %

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