

Natural derivative of a-linolenic acid and hyaluronic acid







INCI: SODIUM HYALURONATE AND LINOLENIC ACID



Who We Are

World **leader in research and manufacturing** of hyaluronic acid.

Innovator in biotechnologies since 1990.

Reliable partner of successful brands.



Production of HyWhite in Contipro

Sustainable biotech production

HyWhite is produced by chemical modification of very low molecular weight hyaluronic acid with a-linolenic acid. Our HA is made by fermentation of a non-haemolytic microbial strain Streptococcus equi.

Environmental friendly production

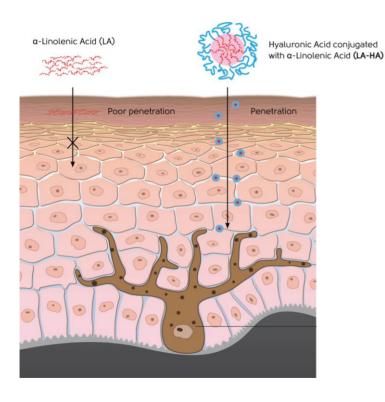
- Everything we make is biodegradable.
- We have our own solar power plant and wastewater treatment plant.
- Our buildings are heated with residual energy from our production operations.

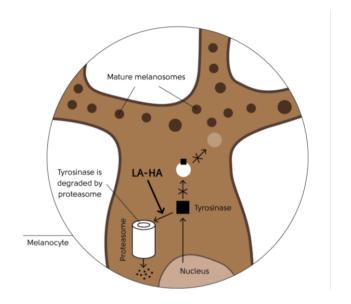
Natural product

Contipro's HyWhite has **natural origin index 1** (according to ISO 16128-1:2016 and 16128-2:2017)



Mechanism of action





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- Hyaluronic acid effectively **delivers a-linolenic acid to the target** tyrosinase in melanocytes.
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- a-linolenic acid **increases degradation of tyrosinase** a key enzyme in melanogenesis.
- 经

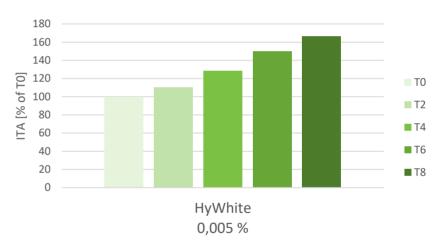
It is also a **proteasome activator** – the degradation of tyrosinase occurs via proteasome.



66%

LIGHTENING EFFECT

In vivo study by Intertek - China



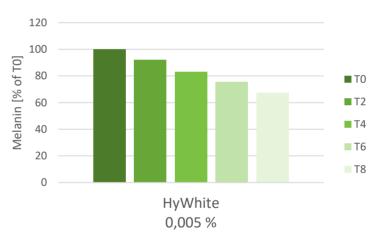
HW (0,005%) in emulsion, face, 35 Asian volunteers. ITA value determined by colorimeter (Courage and Khazaka electronics)



33%

DECREASE IN MELANIN CONTENT

In vivo study by Intertek - China



HW (0,005%) in emulsion, face, 35 Asian volunteers. Melanin content determined by Mexameter (Courage and Khazaka electronics)

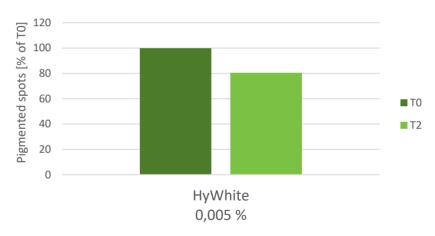


SPOTS REDUCTION

20%

REDUCTION OF PIGMENTED SPOTS

In vivo study by Contipro



HW (0,005%) in emulsion, face, 15 Caucasian volunteers. Number of pigmented spots determined by Visioface

Before

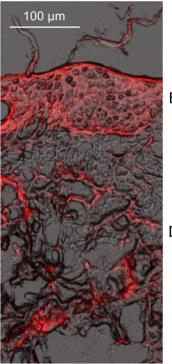


Pigmented spots reduction after 2 weeks of daily treatment with 0,005% HyWhite



Additional advantages of HyWhite

- Improves skin colour uniformity
- Effective both in Asian and Caucasian type of skin
- Increases cell metabolism and energy production
- Stronger capacity to bind to the skin, it is not washed off easily as unmodified HA



Epidermis

Dermis

penetration - Franz diffusion cells, 24h at 37 $^{\circ}$

HyWhite: Collected technical data

- INCI name: Sodium Hyaluronate and Linolenic Acid
- Supplied form: powder
- Samples: 1 g
- Minimal ordering quantity: 1 kg (If ordering smaller quantities, price can increase due to handling fees)
- Recommended concentration in final products: 0.005 0.01 % of powder (safety tests up to 0,4%)
- **Shelf-life:** 24 months
- Source: HyWhite is produced by chemical modification of low molecular weight hyaluronic acid with a-linolenic acid. Hyaluronic acid is obtained by fermentation, alinolenic acid is from a plant source.

- Compatibility and processing: Sensitive to heat and high humidity; avoid prolonged heating (heating over 60 °C for 60 min can lead to a decreased degree of substitution and degradation by oxidation). Extreme pH (less than 4 or more than 10) leads to further decomposition. Incompatible with cationic substances, e.g. surfactants or polymers (polyquarternium-4, polyquarternium-10, etc.)
- **Solubility:** Fully soluble in water; soluble in aqueous mixture of ethyl alcohol and isopropyl alcohol.

We Are Here to Help You

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