

Natural plant products

Treme-HA® is a new type of plant derived high efficiency humectant extracted from Tremella, it has good antioxidation and moisturizing propertie. It is a kind of water soluble polymer, the average molecular weight is over one million Da, and the molecular structure backbone is Mannan made up by alpha (1-3) - glycosidic bond composition, and the branched chain by glucuronic acid, xylose and fucose etc., the active part is common structural part of alpha (1-3) - mannan.



INCI: Tremella Fuciformis Polysaccharide

CAS: 778577-37-0 EINECS: 616-532-7

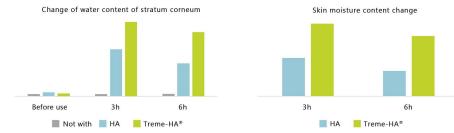
Physical and chemical properties: Treme-HA® products are white or off-white powder, which is easily absorbed and water soluble. And it is easily dispersed in glycerin and propylene glycol while being insoluble in organic solvents such as ethanol and acetone.

Treme-HA® chemical formula

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Moisture contrast test

Apply the same concentration of Treme-HA® aqueous solution and Sodium Hyaluronate Solution to the same tester's skin surface, the change in the moisture content of the stratum corneum of the skin is as follows:



It can be seen from the above table that there is no significant change in the content of skin cuticular layer in the blank control group. The moisture content of the skin cuticular layer in the experimental group coated with Sodium Hyaluronate and Treme-HA®increased significantly after 3 hours and decreased slightly after 6 hours. After 3 hours, the moisture content of Treme-HA®was higher than that of the control group and the experimental group of sodium hyaluronate 6 hours later, which indicated that Treme-HA®had a better effect of replenishing water.

Membrane shrinkage test

Take 1g of Sodium Hyaluronate Solution and Treme-HA $^{\circ}$ solution at a concentration of 1%, apply it evenly on a 6×6cm OHP sheet, and place it in a drying oven with a humidity of 40% at 25°C. Observe the change of appearance (titanium dioxide for easy observation) Sprinkled on the film), as shown in the figure below:





As can be seen from the above figure, the film formed by drying the Sodium Hyaluronate solution is small. This shows that Treme-HA® is softer than Sodium Hyaluronate applied to products.

Product efficacy

Efficient moisturizing

Treme-HA® can significantly enhance the hydratability of the skin cell, increase the moisture content of skin, can form a layer of moisturizing protective film to reduce the moisture loss on the surface of the skin, with dual effect of water retention and water holding.

Antioxidation and anti-aging

With the certain ability of scavenging superoxide radical and hydroxyl radical, it can prevent skin from aging by inhibiting peroxidation of the cytolipin, and promote skin regeneration by increasing the vitality of the skin cells. So Treme-HA®can help human to delay the skin aging and repaire damaged skin.

Improve the skin feeling

Treme-HA® is a kind of high molecular polymer, with good skin affinity and high viscosity. Lubricating effect is obvious after using the skin care products with Treme-HA® added in, and the skin is feels moist and smooth, with no dry and tight feeling.

Instructions for use

Recommended usage: 0.01%-0.5%

Usage: soluble in water, can be directly added into the aqueous phase.

Applications: especially for essence, mask, cream, lotion, toner and other cosmetics.

