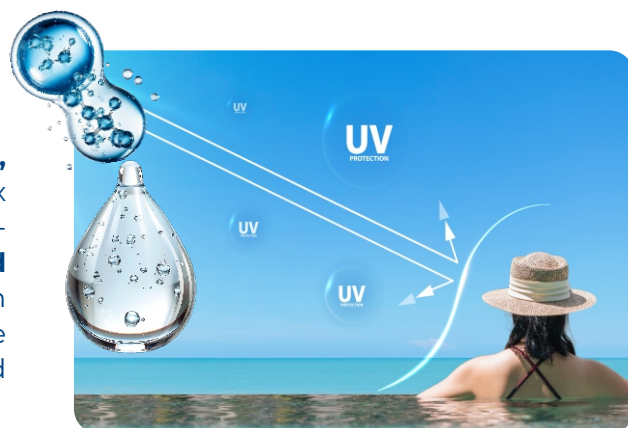


HMW HA (1.5 – 2.5 MDa)

BIOTECH EDGE

Crafted through **precision microbial biotechnology**, HMW Hyaluronic Acid forms a bio-lamellar moisture matrix that mimics the skin's natural defence barrier. Its film-forming molecular network acts as a **biotech-engineered hydration shield**, locking in moisture and enhancing skin comfort while reducing TEWL. The result is instant surface hydration, barrier strength, and visible calmness powered by biotechnology.



High Molecular Weight (HMW) HA is the heavyweight hydrator that primarily covers the skin's surface, forming a breathable film that locks in moisture. Unlike smaller molecules that penetrate deeper, HMW HA's key strength lies in **barrier protection reducing trans epidermal water loss (TEWL)** and keeping hydration sealed in. It reinforces the stratum corneum, helping skin stay plump, soft, and resilient against external stress. With its proven film-forming ability, HMW HA is an indispensable ingredient for long-lasting moisturization and barrier defence.

PRODUCT DETAILS

INCI name:

Sodium Hyaluronate

Appearance:

**White Or Almost White
Powder Or Granules**

Recommended dosage:

0.05 – 0.5%

APPLICATIONS :



Long-wear moisturizers
and creams



Hydrating sheet masks
& overnight treatments



Age defying serum



Barrier-repair and protective
formulations



Sensitive-skin products requiring
non-penetrating moisturizers

KEY FEATURES :

- Non-GMO Microbial Fermentation Origin
- Non-Animal raw materials
- High purity profile suitable for cosmetic application
- Higher Glucuronic acid content
- Lower content of residual protein, nucleic acid, heavy metals and other impurities

WHAT IT BRINGS TO YOUR FORMULATION :

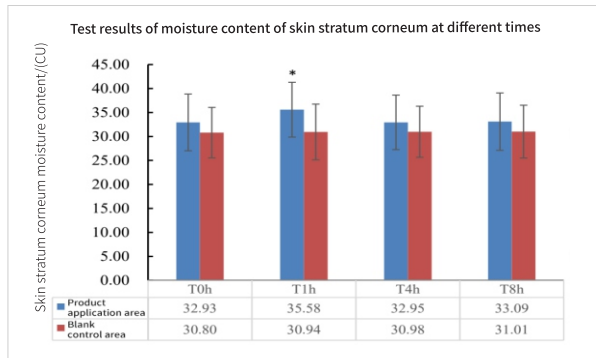
Provides immediate film-forming hydration

Works synergistically with low molecular weight HA for multi-level hydration

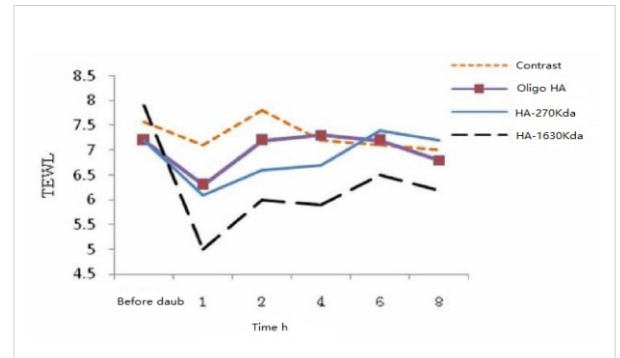
Enhances sensory feel with a silky finish

EFFICACY STUDIES :

A. Rapid Hydration and Reduction in TEWL

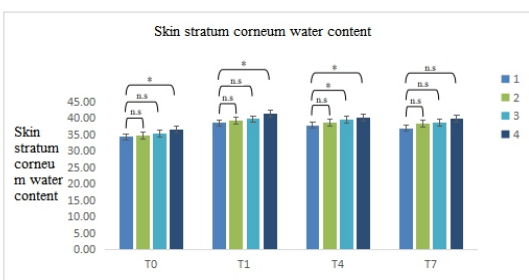
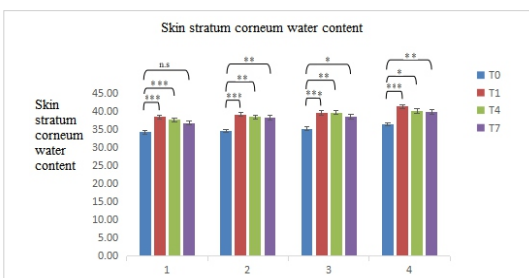


The moisture content of the skin stratum corneum in the product application area increased, and there was a significant difference compared with the blank control area, indicating that the test product has a moisturizing effect.



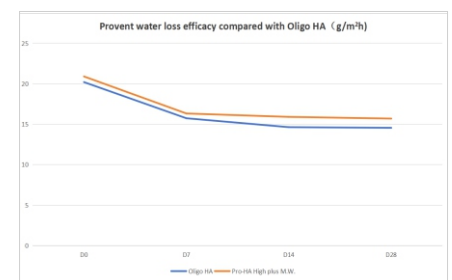
The effect of different molecular weight HA on the amount of skin water loss. As shown in Figure 2, as the molecular weight of HA increases, the loss of skin water decreases. High molecular weight HA has the best effect of preventing skin water loss.

B. Sustained Hydration, Moisturization and Reduction in Redness



High molecular weight has excellent film-forming properties and can form a hydrating layer on the epidermis while reducing water loss.

Conclusion: After one month test, high molecular weight HA has better function of preventing water loss compared with Oligo HA. High molecular weight can form a film on the surface of skin. It has significant ability of keeping long-term moisturizing



CLINICALLY PROVEN BENEFITS :

- Forms an instant hydration shield and strengthen barrier function
- Reduction in dryness and redness
- Provides significant hydration within 1st hour of application
- Noticeable reduction in TEWL with continuous application over 28 days
- Enhances skin softness and smoothness and calms sensitive skin