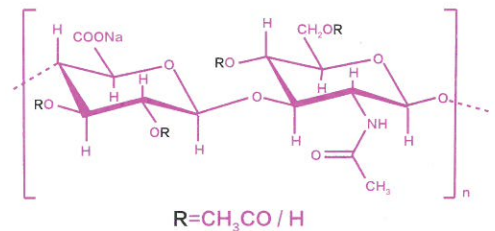




Hymagic™-AcHA

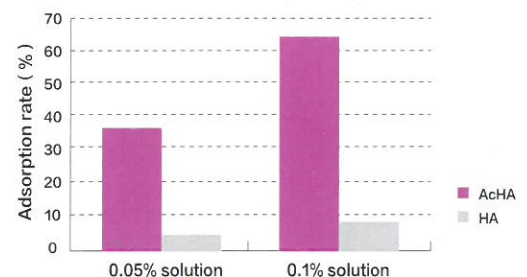
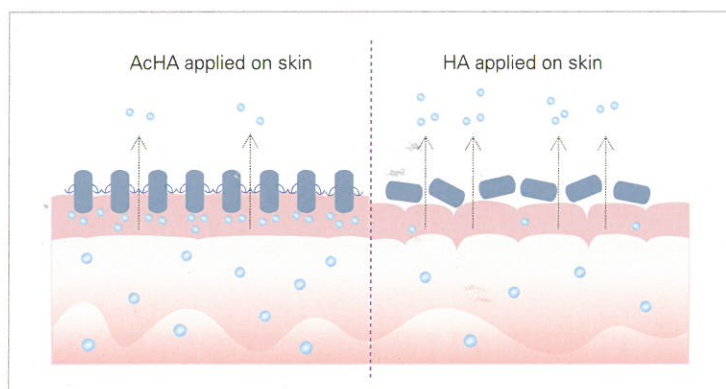
Sodium Acetylated Hyaluronate

Sodium Acetylated Hyaluronate (AcHA), is a specialty HA derivative which is synthesized from the Natural Moisturizing Factor Sodium Hyaluronate (HA) by acetylation reaction. The hydroxyl group of HA is partially replaced with acetyl group; it owns both lipophilic and hydrophilic properties. This helps to promote high affinity and adsorption properties for skin. AcHA has a fresh and not-sticky feeling that can provide superb moisturizing, repair skin barrier, improve skin elasticity, and leave skin smooth. It can be widely applied in repairing, moisturizing, anti-aging cosmetic products, such as essence, mask, cream, etc.



【High affinity & adsorption】

The acetyl group which is highly lipophilic, can help AcHA adhere firmly to the skin surface. Its small molecular weight allows AcHA to penetrate into stratum corneum rapidly. Thus, AcHA can stay on epidermis very tightly with a semi-submerged structure (As shown below). This prevents water evaporation and improves moisture accumulation from inside, while penetrating skin to bind water and softening stratum corneum. AcHA can remarkably reduce skin dryness and roughness and enhance the elasticity.

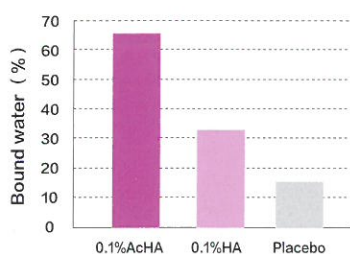


First apply AcHA/HA aqueous solution onto the skin, then detect the adsorption rate after washing. Result shows that, when the concentration is 0.05%, the adsorption rate of AcHA group is 35.42%, compared with 5.32% of HA group. When the concentration is 0.1%, the adsorption rate of AcHA group is 64.77%, compared with 8.29% of HA group.

AcHA can adhere firmly on skin surface even after washing, indicating that AcHA owns high affinity to epidermis providing long-lasting moisturizing and softening efficacies.

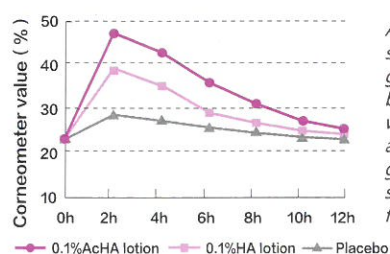
【Superb moisturization】

▶ Water-binding ability in stratum corneum



First treat skin materials with AcHA/HA aqueous solution, then test the amount of water bound in stratum corneum through measuring the loss on drying. Results show that, AcHA group has bound almost twice as much water as HA group.

▶ Increase skin hydration



After 2hrs application, the skin hydration of AcHA group is increased quickly by 103.4%, compared with 65.3% of HA group and 29.6% of placebo group. AcHA can keep skin moisturized and last for 12 hours.

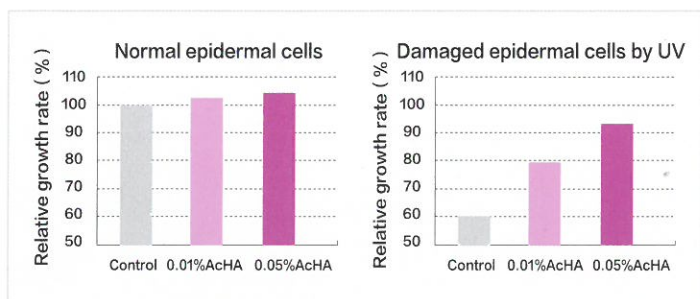
Compared to HA group, AcHA has higher water-binding ability and can provide a substantial hydrating effect to stratum corneum.

AcHA binds water quickly to increase skin hydration while keeping the skin moisturized during the day.

【Repair skin barrier】

▶ Promote epidermal cellular proliferation

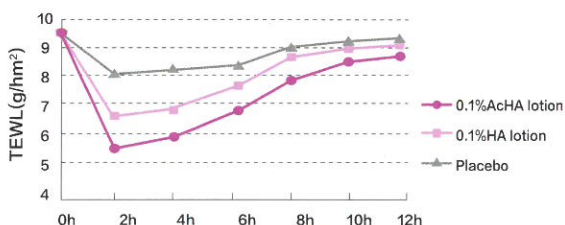
AcHA can promote cellular proliferation and repair damaged epidermal cells, thus strengthen the barrier function of stratum corneum.



Cells: Human keratinocytes (HaCaT)

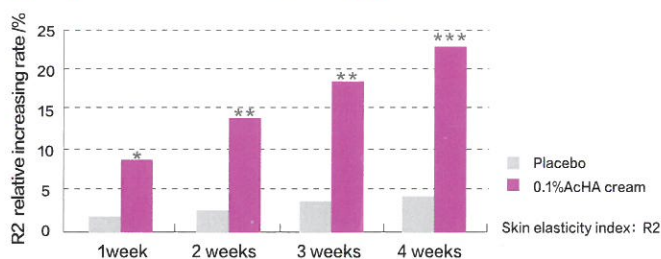
▶ Reduce water evaporation

AcHA can repair skin barrier function and effectively reduce water evaporation from inside, thus improving the skin dryness and roughness.



After 2hrs application, the skin TEWL of AcHA group is reduced by 40.5%, compared with 26.9% of HA group and 12.6% of placebo group. AcHA can reduce skin evaporation and last for 12 hours.

【Improve skin elasticity】



After 4 weeks of continuous application of a facial cream containing 0.1% AcHA, the skin elasticity of volunteers has significantly increased by 1.6 times and skin is softened.

Introduction

INCI name: Sodium Acetylated Hyaluronate

Recommend dosage: 0.01~0.1%

Usage: Good solubility in water, easy to handle.

Application: Repairing, moisturizing, anti-aging cosmetic products, such as essence, mask, cream, etc.

Formulation Recommendation

✿ Double HA Softening Toner

Ingredients	Wt/%
Butylene Glycol	2.0
Glycerin	2.0
Sodium Acetylated Hyaluronate (Hymagic-AcHA)	0.05
Sodium Hyaluronate	0.05
Allantoin	0.2
Creatine	0.3
Panthenol	0.5
Betaine	0.5
Glyceryl Polymethacrylate/ Propylene Glycol	1.0
Phenoxyethanol/Ethylhexyl Glycerin	0.8
Matricaria Chamomilla Extract	1.0
Acrylates/C10-30 Alkyl Acrylate Crosspolymer	0.05
Triethanolamine /AminomethylPropanol	0.05/0.025
Aqua	To 100



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