

# Hyaskin<sup>®</sup>

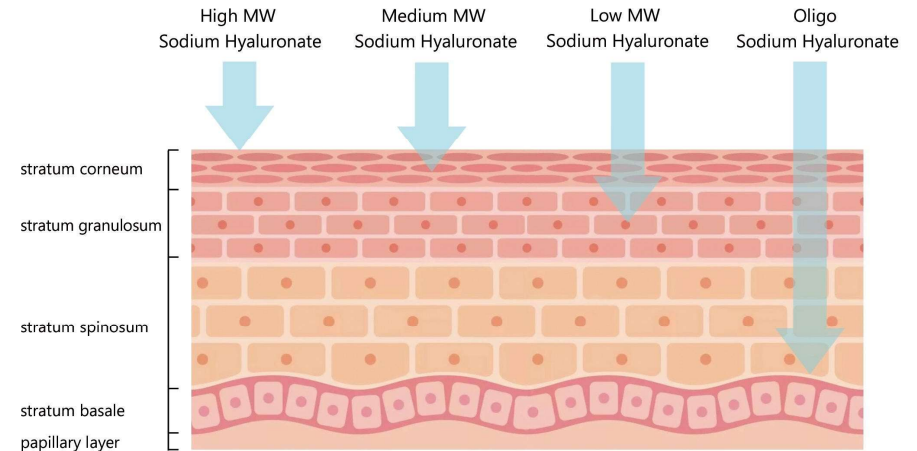
Natural Moisturizing Factor

## Cosmetic Grade Sodium Hyaluronate



Natural Moisturizing Factor

Sodium Hyaluronate is so water-friendly and it has functions of the best moisturizing factor and prevents diseases such as skin infections by preventing the penetration of external substances such as bacteria. Therefore, it is regarded as an ideal "Natural Moisturizing Factor" and widely used in cosmetics that is suitable for different skins, climates and environments.



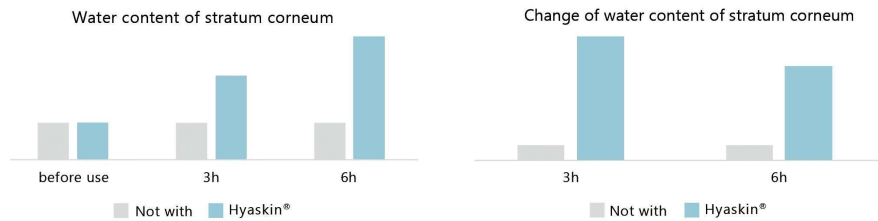
### Function

- **High MW Sodium Hyaluronate > 1.6 million Da**  
Form a dense bio-moisturizing film on the skin surface, long-term moisturizing, anti-pm2.5.
- **Medium MW Sodium Hyaluronate 0.2 million ~ 1.6 million Da**  
Good moisturizing and lubricity effect, slow release and stable emulsification effect.
- **Low MW Sodium Hyaluronate 10000 Da ~ 0.2 million Da**  
Repair damaged and preseniled skin, hydrated soften cuticle, persistent moisturizing, tender skin.  
Increase skin elasticity, delay skin from aging.  
Promote the proliferation and differentiation of the skin cells, scavenging oxyradical.
- **Oligo Sodium Hyaluronate < 10000 Da**  
Be absorbed through skin, moisturizing deeply.  
Anti-aging, repair skin aftersun.

Item Standard	Appearance White or almost white powder or granule	Sodium Hyaluronate ≥ 95%	Appearance of Solution A600nm ≤ 0.01	Nucleic Acids A260nm ≤ 0.5
Item Standard	pH (0.5% aq. sol., 25°C) 5.0-8.5	Molecular Weight 3000Da -2.60 Million Da	Protein ≤0.1%	Loss on drying ≤10.0%
Item Standard	Residue on Ignition ≤20.0%	Chlorides ≤ 0.5%	Iron ≤ 80 ppm	Heavy metal ≤20 ppm
Item Standard	Arsenic ≤2ppm	Bacteria Counts ≤100CFU/g	Molds & Yeasts ≤50CFU/g	Staphylococcus aureus Negative/g
Item Standard		Pseudomonas aeruginosa Negative/g	Hemolytic Streptococci Negative/g	

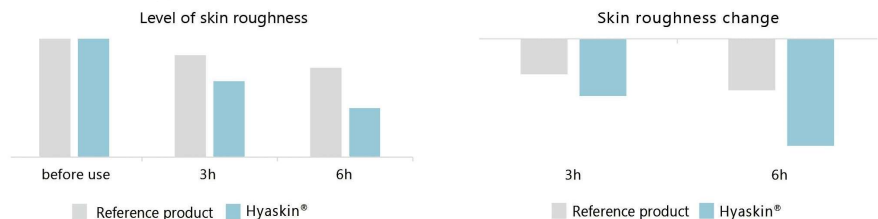
**Effect—Long-lasting moisturizing**

Hyaskin® has strong permeability, it can be absorbed through skin and arises hydration with epidermal cells rapidly. So that it can lock water and replenish water deeply, and improve the moisture content of skin.



**Effect—Tender skin**

It can form a layer of breathable film on the surface of the skin after applying Hyaskin® to the skin. And it can reduce the roughness of skin surface, so that the skin has a good gentle sense. Also, this film can prevent skin moisture evaporation and maintain the luster and softness of the skin lastingly.



**Hyaskin® Product List**



**Application**

**Skin care products:** cream, lotion, make-up water, essence, gel, mask, etc.

**Cleaning products:** facial cleanser, bath lotion, etc.

**Hair Supplies:** Shampoo, Hair Conditioner, Hair Generator, Hair Gel, etc.

# Hyaoligo™

Enzymatic degradation

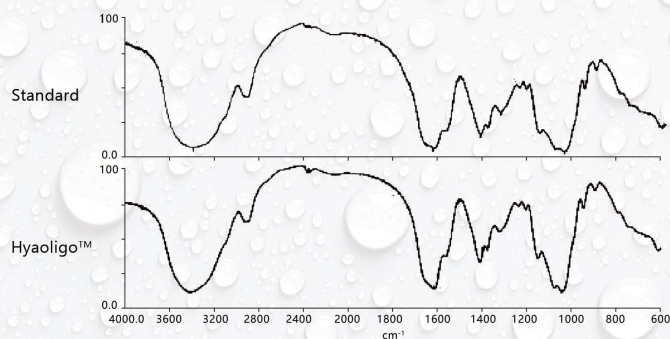
## Oligo Sodium Hyaluronate

Hyaoligo™ is a kind of Oligo Sodium Hyaluronate obtained by enzyme chain-breaking technology on the basis of ordinary Sodium Hyaluronate. The enzymatic digestion technology has no damage to the product structure. The prepared Sodium Hyaluronate has the advantages of good transdermal absorption, high purity, no cytotoxicity and strong oxidation ability.

### Product characteristics

#### Sodium Hyaluronate molecular fragment has complete structure

At present, the main production method of Sodium Hyaluronate oligomer is chemical degradation method. The reaction conditions of chemical degradation method are intense, which easily destroys the molecular structure of Sodium Hyaluronate monosaccharide. Hyaoligo™ Sodium Hyaluronate produced by enzymatic digestion has mild reaction conditions and complete molecular weight fragments.



The above infrared spectra show that the enzymatic digestion method of Hyaoligo™ Sodium Hyaluronate is consistent with the standard spectra of European Pharmacopoeia, while the chemical degradation method of Oligo Hyaluronate is between 1600 cm<sup>-1</sup> and 1000 cm<sup>-1</sup>, which is quite different from the standard spectra of European Pharmacopoeia. The results showed that the structure of Oligo Hyaluronate prepared by chemical degradation was destroyed, while the structure of Hyaoligo™ Sodium Hyaluronate prepared by enzymatic digestion was intact.

#### Low molecular weight is easier to be absorbed through skin.

Hyaoligo™ Sodium Hyaluronate has a molecular weight of less than 10 kDa, an average size of less than 25 nm, and a cell gap of about 40-50 nm. Compared with ordinary molecular weight Hyaluronic Acid, Hyaoligo™ Sodium Hyaluronate is easier to penetrate into deep skin.

### Product efficiency

#### Deep moisturization

Hyaoligo™ can be absorbed through the skin, which can quickly hydrate with epidermal cells, lock water deeply, replenish water, and improve skin moisture content.

#### Nutrition of skin and repair of damaged cells

Hyaoligo™ can repair damaged cells, improve cell viability and promote wound healing. When it is applied to skin care products it can repair damaged cells, make skin smooth, moist and elastic.

#### Free radical scavenging, anti-oxidation and anti-decay

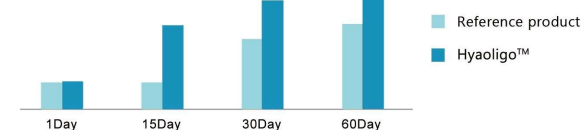
Hyaoligo™ has the ability of scavenging and reducing free radical (for example) reduce the formation of melanin, prevent sun exposure, whitening and anti-aging.

#### Instructions for use

Dosage recommended : 0.1%-1%

### Focuschem · Manufacturer of Sodium Hyaluronate Series Product

#### Comparison of skin moisture content



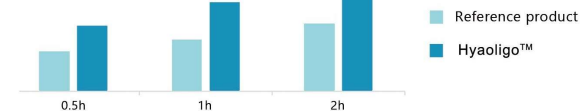
Compared with the control group, Hyaoligo™ can significantly increase the skin moisture content, lasting for 60 days, the effect is more obvious.

#### Comparison of cell proliferation rate



Compared with other two groups of products, Hyaoligo™ has better cell repair ability, can promote wound healing and make skin smooth as before.

#### Contrast of free radical removal ability



Compared with the control group, Hyaoligo™ has a stronger ability to scavenge free radicals. The higher the concentration, the more obvious the effect.

Method of use: It can be used in organic solvents such as propylene glycol and glycerol, or can be dissolved in water directly. Avoid simultaneous use with cationic preservatives and cationic surfactants.

# HA Plus™

Exclusive use for high-end Products

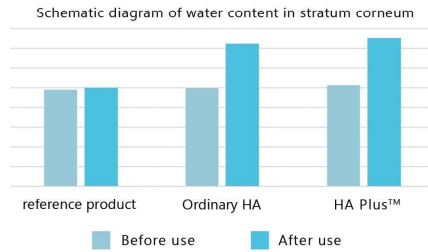
## Cationic Hyaluronic Acid

HA Plus™ Hyaluronic Acid is a kind of new product developed on the basis of ordinary Sodium Hyaluronate. Besides the same high moisture properties and high viscoelasticity as ordinary Sodium Hyaluronate, it also has good adsorption and affinity. It is used in hair care products and cleaning cosmetics products, and it can be adsorbed on the hair and skin surface to keep its moist state and can not be washed away easily by running water.

### Product characteristics

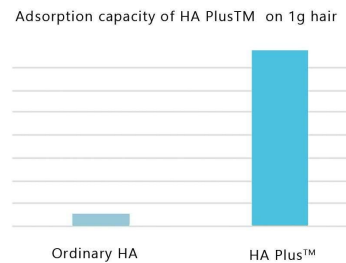
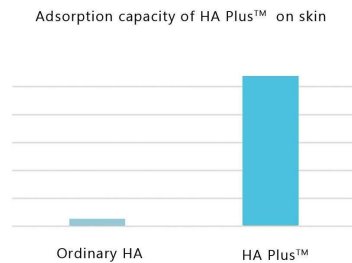
#### Unique moisturizing propertie

After using of HA Plus™, the moisture content of the stratum corneum increased significantly, and the increased content was much higher than the ordinary Sodium Hyaluronate increased. This shows that the using of HA Plus™ plays a better role in moisturizing than ordinary Sodium Hyaluronate.



#### Good effect of adsorption and affinity

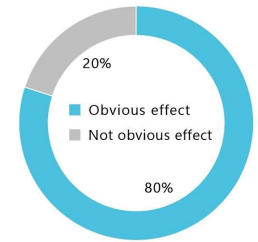
HA Plus™ is more easily adsorbed on the skin and hair surface, and it is not easy to be washed away by water. It plays an important role in moisturizing lastingly and efficiently.



#### Better skin feeling, be absorbed more easily

When add HA Plus™ into skin care products, you can feel good ductility when use it and skin feeling is refreshing without oily feeling after use. Skin becomes more moist and shinier with long-term use.

Skin sensory analysis after using HA Plus™



Test Objects: 10 peoples

Experimental Method: Use HA Plus™ on topical skin(three time a day), and collect the data and then confirm if the testers can feel the improvement on skin hydration, softness, and moisturaztion after 3 days.

#### Application

Hair care products:

Shampoo, hair conditioner, hair mask, hair care agent, etc.

Cleaning cosmetics products:

Facial cleanser, cleansing cream, cleansing foam, soap, shower gel, etc.

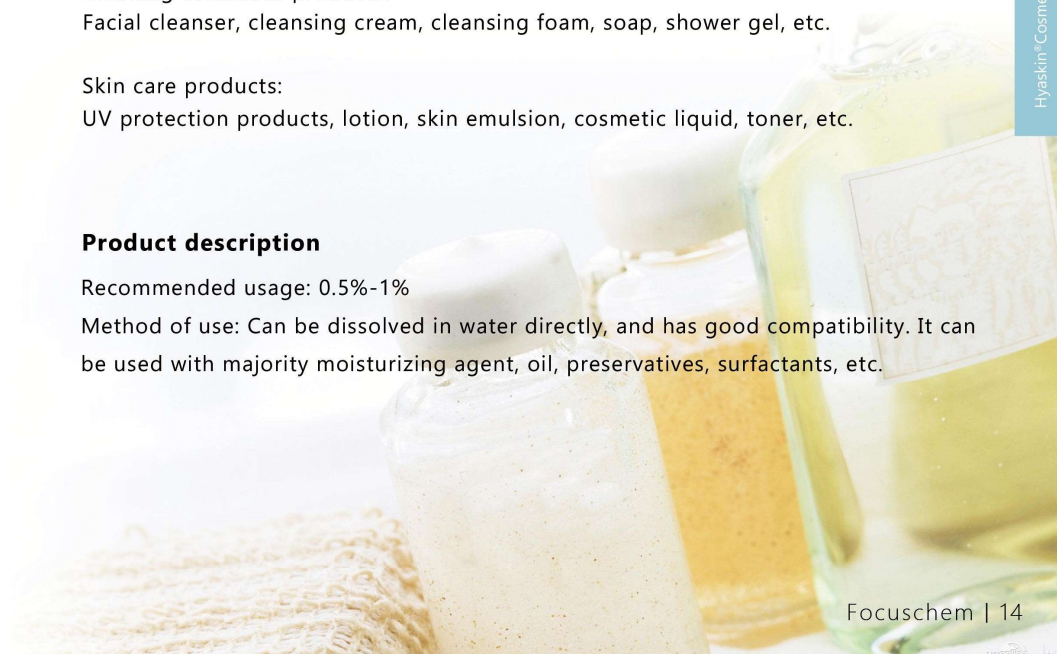
Skin care products:

UV protection products, lotion, skin emulsion, cosmetic liquid, toner, etc.

#### Product description

Recommended usage: 0.5%-1%

Method of use: Can be dissolved in water directly, and has good compatibility. It can be used with majority moisturizing agent, oil, preservatives, surfactants, etc.



Hyaskin®-Cosmetic Grade Sodium Hyaluronate

Hyaskin®-Cosmetic Grade Sodium Hyaluronate

# Hyrinse®

Hair care products

## Hyrinse® Sodium Hyaluronate Solution

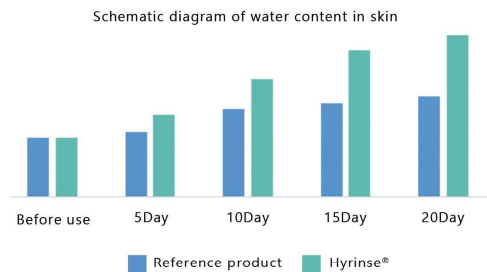
Hyrinse® is specially designed for hair products. It is rich in moisturizing ingredients include high molecular weight Sodium Hyaluronate, HA Plus™ and Oligo Sodium Hyaluronate, etc. It combines the functions of three kinds of Sodium Hyaluronate series, tridimensional moisturizing when use it and skin feeling is refreshing without oily feeling after use. It can improve the protective screen function of scalp obviously, nourish the head skin, firm the hair, increase hair burnish, make it shiny, silky and easy combing.



### Product Characteristics

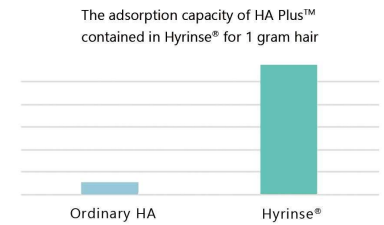
#### Multi-defence

Hyrinse® contains high molecular weight Sodium Hyaluronate, which can form a highly dense protective film on the hair surface, and reduce water loss. Its moisturizing effect is long-lasting. It can reduce UV damage to hair and scalp.



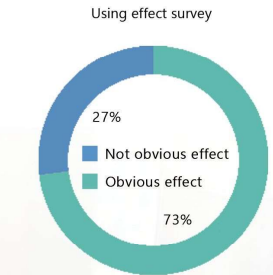
#### Efficient moisturizing

HA Plus™ Hyaluronic Acid can be absorbed on the hair surface firmly and not easy to be washed. With double moisturizing effect, it can improve the hair's combing and anti-static properties, making the hair more soft and bright.



#### Improve the protective screen of the scalp

The Sodium Hyaluronate in Hyrinse® can enhance the hydration and moisturizing capacity of the scalp, and moisten the scalp. It can also improve the pruritus and dandruff condition caused by scalp's dryness. With rapid penetration, transdermal absorption and deep moisturizing functions, Oligo Sodium Hyaluronate can improve the protective screen of the scalp.



#### Specification

Item	Standard
Dynamic viscosity ( mPa·s )	Measured Value
pH value	6.0~7.5
Appearance of Solution	≥ 99.0
Protein	≤ 0.002
Heavy metal (as Pb)	≤ 0.2
Bacteria counts ( CFU/g )	≤ 10
Molds & Yeast ( CFU/g )	≤ 5
Staphylococcus aureus	Negative/g
Pseudomonas aeruginosa	Negative/g

#### Application

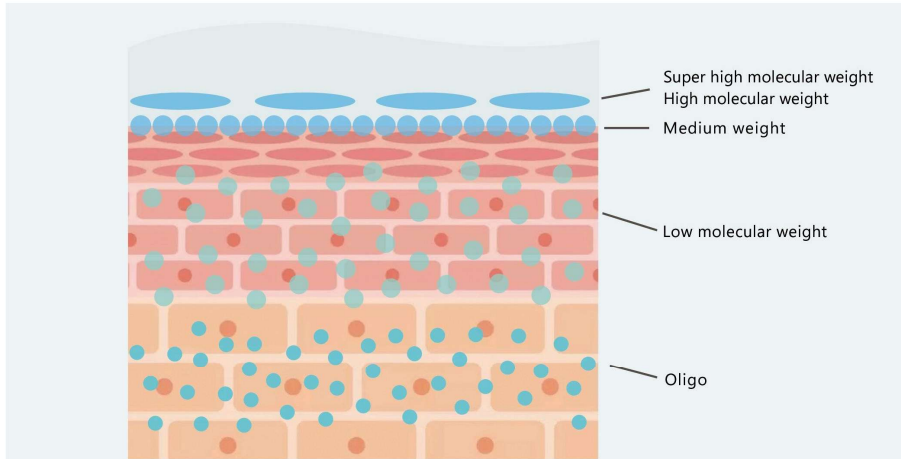
**Haircare products:** Shampoo, hair conditioner, hairdressing gel, moistening hair cream, hair mask etc.

**Suggested addition:** 1-10%

# 5M Hyaskin™ Multiple Moisturizing

## Multiple Sodium Hyaluronate Solution

5M Hyaskin™ is a Multiple Sodium Hyaluronate Solution launched by our company. It contains Medium molecular weight, low-molecular weight, oligo molecular weight and high molecular weight and ultra-high molecular weight Sodium Hyaluronate to form a stereoscopic sponge structure, which protects the skin in all aspects.



### Super high and high molecular weight Sodium Hyaluronate

It is formed an invisible and dense protective film on the surface of the skin with function of anti-pollution from outside, anti-sunburn and anti-smog.

### Medium molecular weight Sodium Hyaluronate

Adheres to the surface of the skin and hydrates and softens the stratum corneum to make the skin tender.

### Low molecular weight Sodium Hyaluronate

Repairs and nourishes damaged skin, handles aging and increases skin elasticity.

### Oligo Sodium Hyaluronate

Transdermal absorption, rapid penetration into the dermis of the skin, deep hydration, and maintenance of the muscle base.

## Product Features

### Scientific proportion

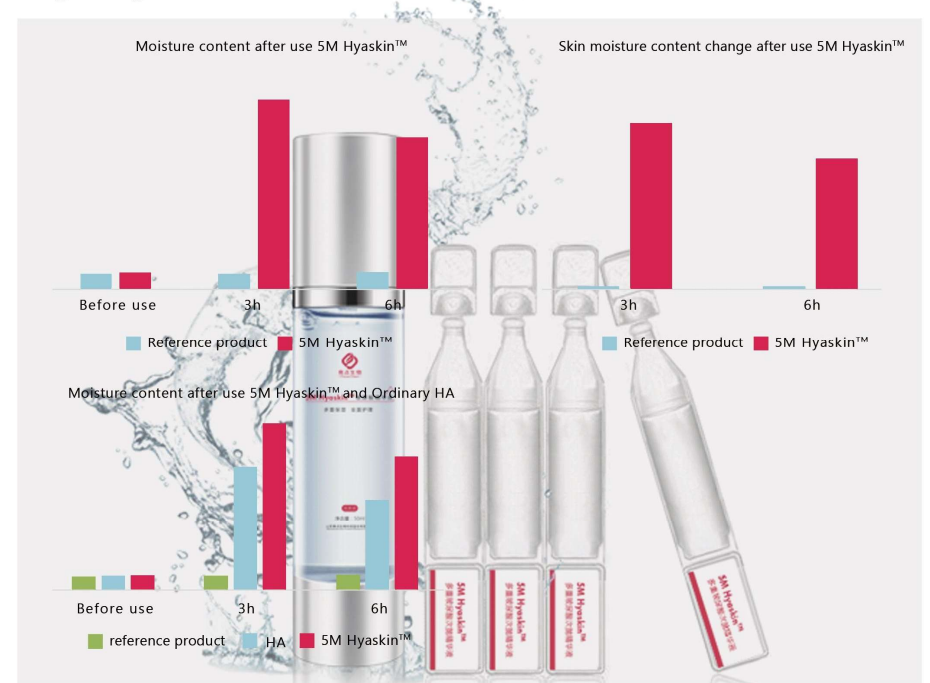
It is formulated scientifically with the function of multiple hydration based on the characteristics of Sodium Hyaluronate with different molecular weight.

### Refreshing skin

The network formed by Sodium Hyaluronate and water plays the role in breathable hydration and fresh lubrication.

### Stereoscopic water lock

The stereoscopic sponge structure made by Sodium Hyaluronate of multiple molecular weight range results in tender skin and water lock.



## Product applications

5M Hyaskin™ can be directly used as essence.

5M Hyaskin™ can be used as a cosmetic ingredient in skin care products such as toners, facial mist, skin emulsion, serums, creams, masks, etc.

Recommended usage: 10%-50%