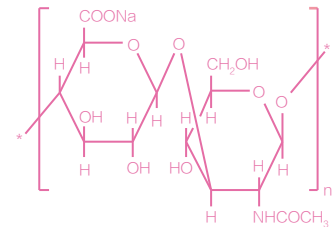


1 Introduction

Sodium Hyaluronate (Hyaluronic Acid, HA), the sodium salt of hyaluronic acid, is a linear high molecular weight mucopolysaccharide composed by thousands of repeating disaccharide units of D-glucuronic acid and *N*-acetyl-D-glucosamine.



Structural formula of HA

2 Advantages

- **High safety**
 - ECOCERT certification
 - Non-animal origin bacterial fermentation
 - A series of safety tests carried out by authorized testing organizations
- **High purity**
 - Very low impurities (such as protein, nucleic acid and heavy metal)
 - No pollution of other unknown impurities and pathogenic microorganism in production process assured by strict production management and advanced equipments
- **Professional Service**
 - Customerized products
 - All-around technical support for HA application in cosmetic

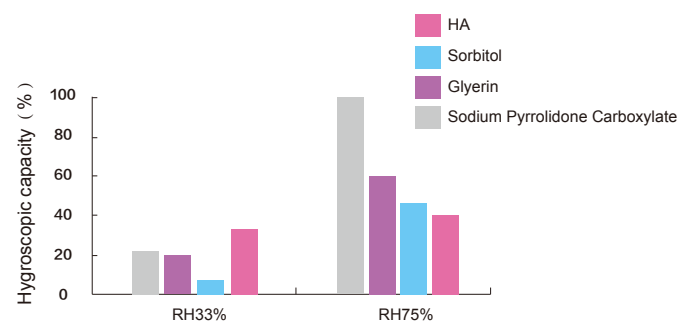
3 Functions

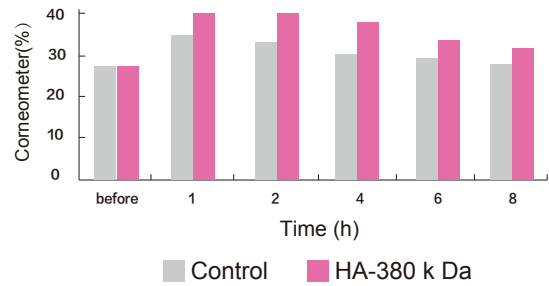
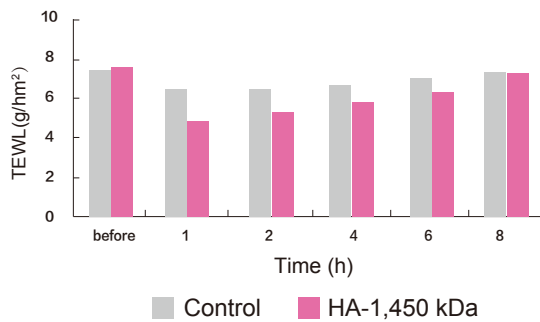
The molecular weight of HA is 1 kDa-3,000 kDa. HA with different molecular weight has different function in cosmetics.

Types	Molecular weight	Functions
HA	≥1,000 kDa	Lubricating and film-forming, moisturizing, preventing skin damage, thickening and keeping emulsion stable
Low molecular weight HA	10 kDa ~ 1,000 kDa	Nourishing the skin, long-lasting moisturizing
Oligo HA	< 10 kDa	Trans-dermal absorption, deep hydrating, anti-ageing, repairing skin damage

4 Efficacy Data

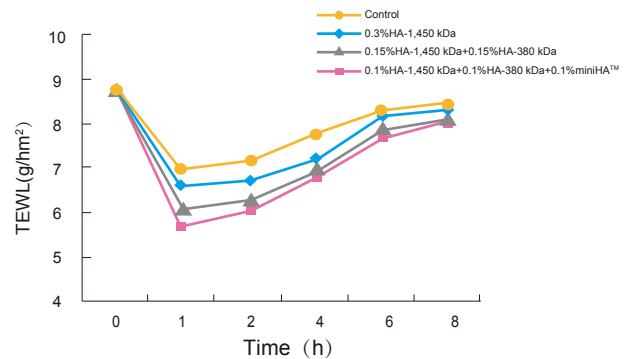
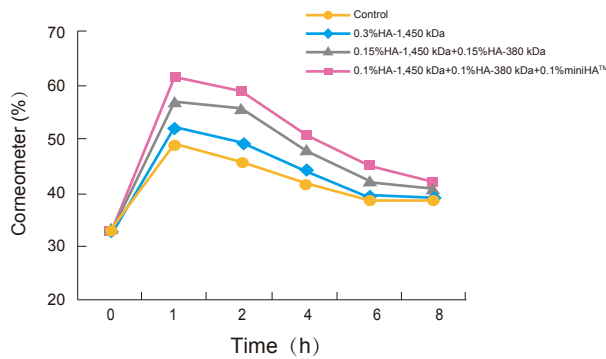
- ▶ Compared with other humectants, HA is less effected by the environment, as it has the highest hygroscopic capacity in a relatively low humidity, while has the lowest hygroscopic capacity in a relatively high humidity. HA is widely well known in the cosmetic industry as an excellent moisturizer and is called the “Ideal Natural Moisturizing Factor”.





▶ High molecular weight HA has good lubricity and film-forming properties. When applying cosmetic containing high molecular weight HA to skin, the trans-epidermal water loss (TEWL) is reduced and skin becomes tender and glossy.

▶ Low molecular weight HA can partly penetrate into the skin and nourish it from inside.



▶ When different molecular weights HA are used simultaneously in the same cosmetic formulation, it can have synergetic effects, to activate global moisturizing and multiple skin care function. More skin moisture and less trans-epidermal water loss keep the skin beautiful and healthy.

5 Applications

Application	Products	Dosage	Usage
Skin care	cream, emulsion, essence, lotion, gel, facial mask, etc.	0.1% ~ 0.5% for HA powder 10% ~ 50% for HA solution	Dissolving in water. Heating can accelerate the dissolution of HA.
Makeup	lipstick, eye shadow, foundation, etc.		
Cleansing	facial cleaner, body wash, etc.		
Hair care	shampoo, hair conditioner, styling gel, hair restorer, etc.		

6 Package

HA powder: 100g/bottle; 500g/bag; 1kg/bag
HA solution: 1kg/bottle; 20kg/drum



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