



# cationHA™-Clear 1

## Substantive Sodium Hyaluronate

A moisturizer designed especially for hair care that can improve the barrier function of the scalp.

### 【Introduction】

cationHA™-Clear 1, as a conditioning moisturizer, is a complex association between cationic Polyquaternium-10 and Sodium Hyaluronate (HA) with different molecular weights.

### 【Advantages】

#### ► High Substantivity

It creates a synergistic polymer composite that improves and expands the main properties of two polymers and the substantivity of HA on the hair and skin. It shows higher substantivity to the hair and is suitable for rinse-off products.

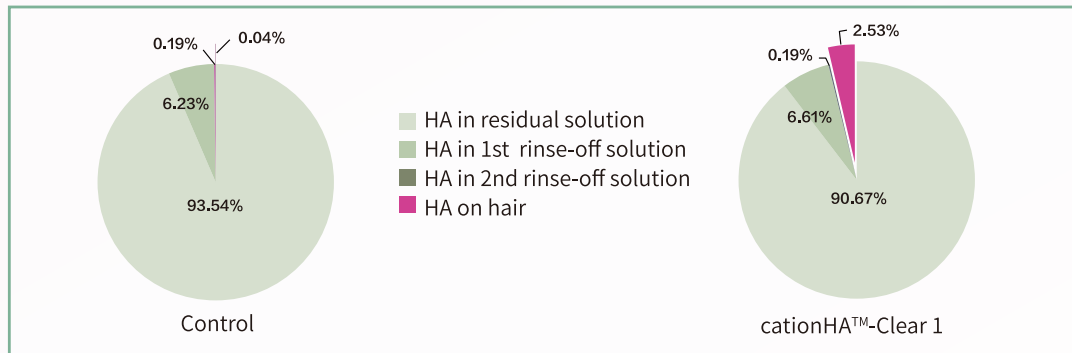


Fig.1 cationHA™-Clear 1 Resident Test

#### ► Transdermal Repairing in Scalp Care

cationHA™-Clear 1, containing the special extremely low molecular weight Hydrolyzed Sodium Hyaluronate with high activity, shows transdermal absorption and repairing damaged scalp cells activity. It can repair and regenerate the self-protection of scalp to be healthy again.

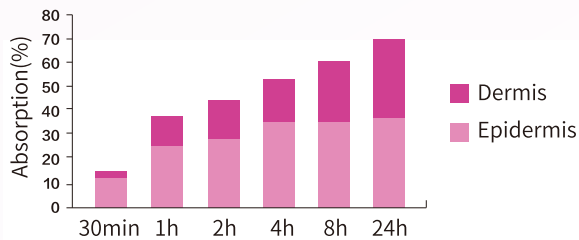


Fig.2 Transdermal absorption Test

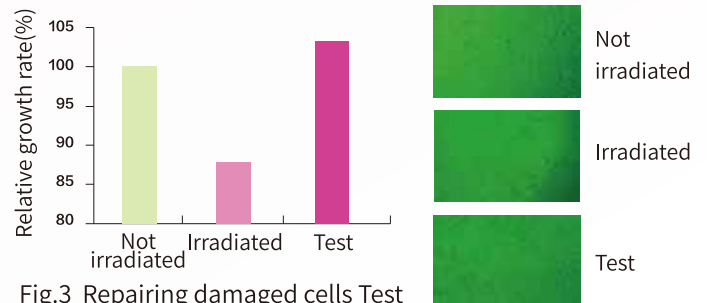


Fig.3 Repairing damaged cells Test

## ► Reduction of the Irritancy

It helps to reduce the inflammation of the skin caused by surfactants present in the formulas. Test performed by a professional third party lab indicates that HA, especially the low molecular weight type, can reduce significantly the irritancy of the skin caused by SLS.

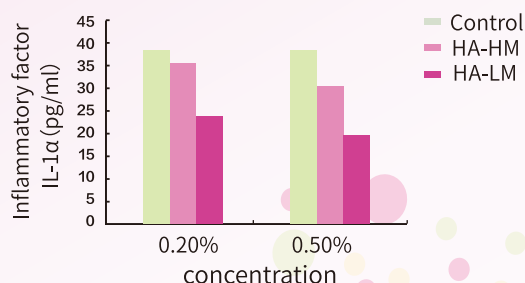


Fig.4 Reconstructed Human Skin Model Anti-irritation Test

## ► The long-term protection and the barrier function of the scalp

The test has been carried on 30 volunteers. Considering the specificity of the scalp, the skin of the forearm flexor side has been treated; It was cleaned once every two days for four consecutive weeks with a shampoo containing 1% cationHA™-Clear 1. The test indicates that after applying cationHA™-Clear 1 on the skin, the barrier function of the scalp has been sensibly improved.

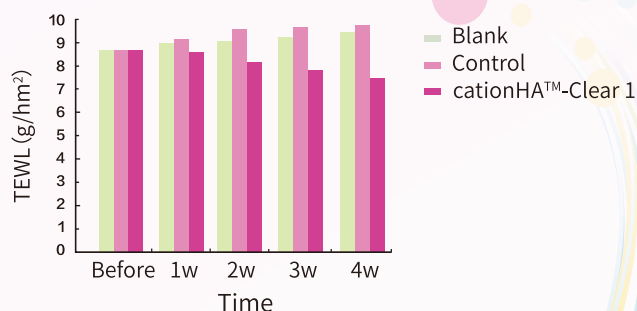


Fig.5 The Test of the Barrier Function of the Scalp

## ► Foam Improving

Foaming property of shampoos with cationHA™-Clear 1 has been tested and showed that foams are finer.

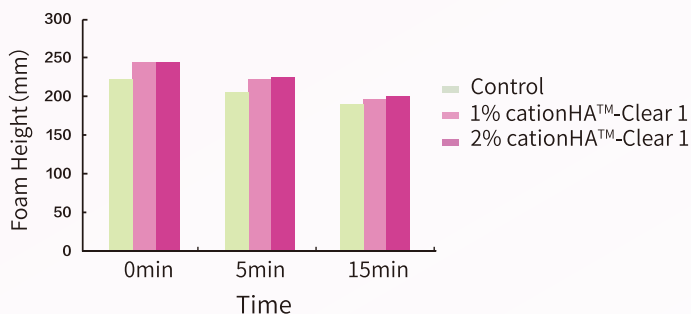


Fig.6 Shampoo Foam Test

## [ Instructions ]

**INCI Name:** Hydrolyzed Sodium Hyaluronate/ Sodium Hyaluronate/ Polyquaternium-10/ Glycerin/ Phenoxyethanol/ Ethylhexylglycerin /Aqua

**Applications:** Shampoos, Conditioners, Cleansers, Body care products

**Usage:** Add cationHA™-Clear 1 at the last phase of formulation

**Recommended dosage:** 0.5%~1.0%

