Hyaluronsan HA-LQ (Powder) Series

Sodium Hyaluronate

Kewpie Corporation

"Hyaluronsan HA-LQ (powder) Series" is a series of Sodium Hyaluronate which is made by fermentation method and is a highly refined hyaluronic acid which has excellent stability. It has high water-binding property and is made into sodium salt which is easy-to-formulate with various ingredients.

The product has the following varieties with different molecular size.

Hyaluronsan HA-LQ MW : $0.85 \sim 1.6$ M. Hyaluronsan HA-LQH MW : $1.2 \sim 2.2$ M.

WHAT IS HYALURONIC ACID ?

- Hyaluronic acid is a kind of acid mucopolysaccharides abundantly existing in eyes' vitreous body, umbilical cord, synovial fluid, skin, pleural fluid, blood serum, chicken comb, shark's skin and whale's cartilage.
- Hyaluronic acid exists in connective tissues like skin as a compound with protein. It fills up intercellular gap together with chondroitin sulfate to maintain tissue structure, to retain moisture, lubricability and flexibility of the tissue and to protect the tissue from infection by bacteria.
- Its excellent property of moisture retention plays a very important role especially in such organs like eyes, joints and skin where keeping moisture is crucial. Due to such beneficial properties hyaluronic acid will have more applications in the future.

EXCELLENT FEATURES OF Hyaluronsan HA-LQ (powder) Series

This is sodium hyaluronate in powder form which is made by fermentation using *Streptococcus zooepidemicus* and due to its high water-holding capacity it prevents skin and hair from drying and keeps them moist.

Hyaluronsan HA-LQ (powder) Series is recommended for making wide range of cosmetic products.

COMPOSITION

Ingredient Name	INCI Name	Composition
Sodium Hyaluronate	Sodium Hyaluronate	100 %

*This conforms to "Sodium Hyaluronate(2)" in The Japanese Standards of Quasi-drug Ingredients.

USE

Moisturizing ingredient for various cosmetics Improving physical property of cosmetics (like viscosity improver)

SPECIFICATIONS AND A TYPICAL ANALYSIS

	g	Analysis	
	Specifications	HA-LQ	HA-LQH
Description	White to pale yellow powder, having a slight, characteristic odor.	Passed	Passed
Identification (1)	To 10mL of a solution of a sample (1 in 1,000) add 2 to 3 drops of a solution of cetylpyridinium chloride (1 in 20): a white precipitate is produced.	Positive	Positive
(2)	A solution of a sample (1 in 1,000) responds to the Qualitative Tests (1) for sodium salt.	Positive	Positive
(3)	To 1mL of a solution of a sample (1 in 10,000) add 6mL of sulfuric acid and heat it in a water bath for 10 minuets. After cooling, add 0.2mL of carbazole TS, allow to stand: a red to red-purple color develops.	Positive	Positive
pH	$6.0 \sim 7.0 (0.1 + 100)$	6.4	6.3
Heavy Metals	NMT 2 0 ppm	NMT 20ppm	NMT 20ppm
Arsenic	NMT 2 ppm	NMT 2ppm	NMT 2ppm
Protein	NMT 0. 1 %	NMT 0.1%	NMT 0.1%
Presence of the other mucopolysaccharides	None detected	Passed	Passed
Hemolytic streptococcus	Negative	Negative	Negative
Hemolysis	A red blood corpuscle is precipitated and the top of the solution is clear.	Passed	Passed
Loss on Drying	NMT 1 0. 0 %	4.4%	4.0%
Residue on Ignition	$15.0\sim20.0\%$	17.6%	17.8%
Nitrogen	$3.0 \sim 4.0\%$	3.4%	3.4%
Glucuronic acid	$40.0\sim50.0\%$	47.2%	48.2%
Intrinsic Viscosity	$\begin{array}{l} {\rm HA-LQ} & : 1 \ 5. \ 0 \ \sim \ 2 \ 5. \ 0 \ {\rm dL/g} \\ {\rm HA-LQH} & : 1 \ 9. \ 5 \ \sim \ 3 \ 2. \ 0 \ {\rm dL/g} \\ {\rm HA-LQSH} : 2 \ 5. \ 0 \ \sim \ 4 \ 0. \ 0 \ {\rm dL/g} \end{array}$	20.2dL/g	$25.9 \mathrm{d}\mathrm{L/g}$
Aerobic plate counts	NMT 100/g	NMT20/g	NMT20/g
E. coli	Negative	Negative	Negative
Mold and Yeast	NMT 100/g	NMT 50/g	NMT 50/g

STORAGE AND EXPIRY

Storage

HA-LQ, HA-LQH:

Store at ordinary temperature and keep it away from direct sunlight and high heat, high humidity.

Expiry

HA-LQ : 24 months from the manufacturing date. (unopened, at ordinary temperature)

HA-LQH : 18 months from the manufacturing date. (unopened, at ordinary temperature)

%1 months = 30 days

PACKING

100 g (in aluminum pouch) \times 1 \sim 10 = 1 carton 1 kg (in aluminum pouch) \times 1 \sim 10 = 1 carton

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