



# HYALO-OLIGO

Hyaluronic Acid Oligomer

Q.P. CORPORATION

Q.P. HYALO-OLIGO is low molecular weight Hyaluronic Acid (Hyaluronic Acid Oligomer) made by fermentation using *Streptococcus zooepidemicus* and average molecular weight\* is less than 10,000 (now patent under application).

HYALO-OLIGO is highly purified and shows excellent stability, and has the INCI name as "Hydrolyzed Hyaluronic Acid".

These properties of HYALO-OLIGO moisten the skin and hair to keep out the dryness and also its abilities of the excellent penetration and tissue-affinities demonstrate good lubricating qualities.

Its solution has low viscosity and clear and transparent appearance.

Therefore it is a suitable material for producing cosmetics under various manufacturing conditions and environments.

Please use this widely as a cosmetic material.

\* By conversion from intrinsic viscosity

## WHAT IS HYALURONIC ACID ?

- Hyaluronic acid is one of the acidic mucopolysaccharides naturally existing in large quantities in vitreous humor, serum, chicken comb, shark skin, and whale cartilage.
- Hyaluronic acid, combined with protein and chondroitin sulfate, is found in the space between cells of connective tissue such as skin. It serves important functions for the maintenance of structure, moisture, lubricability and flexibility of the tissue and for protection against invasion of bacteria.
- The excellent water-holding capacity of hyaluronic acid makes it capable of retaining moisture in the eyes, joints, and skin tissues. It is also expected that a number of products utilizing the advantageous properties of hyaluronic acid will increase in the future.

## CHARACTERISTICS

- HYALO-OLIGO is easy to fit to skin and gives fine after-use feeling.
- HYALO-OLIGO is well absorbed by skin and retains moisture for long period.



## SPECIFICATIONS AND RESULTS ( representative sample )

	SPECIFICATIONS	RESULTS
DESCRIPTION	White to pale yellow powder with having slight characteristic odor.	Passed
pH	2.0 — 4.0 ( 0.1 + 100 )	3.2
HEAVY METALS	NMT 20 ppm	NMT 20ppm
ARSENIC	NMT 2 ppm	NMT 2ppm
PROTEIN	NMT 0.1 %	NMT 0.1 %
HEMOLYTIC STREPTOCOCCUS	Negative	Negative
HEMOLYSIS	A red blood corpuscle is precipitated and the top of the solution is clear.	Passed
LOSS ON DRYING	NMT 10 %	4 %
NITROGEN	3.0 — 4.3 %	3.6 %
GLUCURONIC ACID	45.0 — 50.0 %	50.0 %
KINEMATIC VISCOSITY	NMT 1.5 mm <sup>2</sup> /s	1.1 mm <sup>2</sup> /s
AEROBIC PLATE COUNTS	NMT 100/g	NMT20/g
E. COLI	Negative/0.1g	Negative/0.1g
MOLD AND YEAST	NMT 100/g	NMT 50/g

## STORAGE AND EXPIRATION PERIOD

Storage : Store at ordinary temperature and keep it away from high temperature and direct sunlight.

Expiration period : 3 years from manufacturing date.  
(unopened, at ordinary temperature )

## PACKING

100 g × 1

1 kg × 1



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