









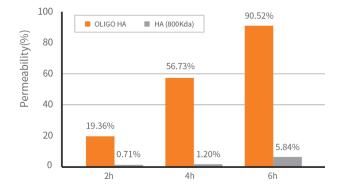
#### GENERAL DESCRIPTION FOR RAW MATERIAL

Hyaluronic Acid (HA) is a naturally occurring, non sulfated glycosaminoglycan (GAG), existing in the connective, epithelial tissues, synovial joint fluid etc. It is one of the major matrix substances together with collagen and elastin strengthening the matrix.

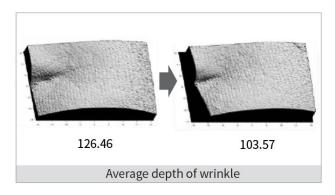
HA occurs in all vertebrate tissues and body fluids in varying amounts. In the skin, HA constitutes the primary reservoir of HA in the body, more than 50% of the total. HA is present at very high concentrations in the narrow extracellular space between the stratified keratinocytes of epidermis and has a turnover time of less than 1 day. This dynamic metabolism suggests that HA is a space filler involved in the upwards migration and shape changes of the differentiating keratinocytes, that it provides extracellular space for the exchange of nutritional and regulatory metabolites for the upper spinous cells and it acts as a signaling ligand to enhance keratinocyte motility and survival.

#### **EFFICACY**





# After application of cream containing 0.2% Oligo-HA



#### PRODUCT INFORMATION

TRADE NAME	OLIGO-HA
INCI NAME	HYALURONIC ACID
HYALURONIC ACID	100%
STANDARD PACKAGE	1KG











**CELL PROLIFERATION** 

**ANTI-AGING** 

**EPIDERMIS REGENERATION** 

#### TECHNICAL INFORMATION

## Storage & Shelf life

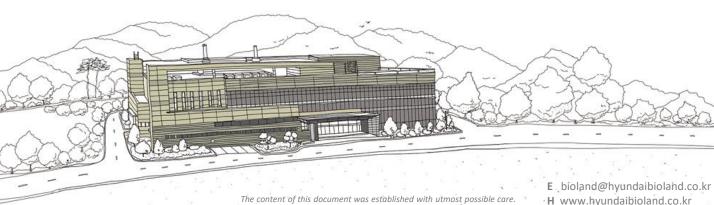
OLIGO-HA should be stored in a dark place at 2-8°C temperature in tightly closed and lightproof packing. If stored in these conditions the shelf life is at least 24 months. Once the original packing is open, it is highly recommended to use at once.

### Safety information

The safety of ingredients used in cosmetic formulations is reviewed by the Cosmetic Ingredient Review (CIR) program. The CIR Expert Panel concluded that Hyaluronic acid is considered safe for use in cosmetics as they described in the safety assessment\* . Based on their conclusion with the safety assessment, OLIGO-HA is believed as a safe material for cosmetic use.

## **SPECIFICATION**

Appearance	White ~ Light yellow powder
Appearance of 0.5% solution	Colorless clear liquid
Water Content (KF)	Not more than 10.0%
* Uronic Acid Content	45 ~ 51.3%
* Hyaluronic Acid Content	88 ~ 100%
Other Acidic Mucopolysaccharides	Not Detected
Molecular Weight(GPC)	3.0 ~ 10.1 Kda
Total Plate Count	Not more than 1 x 10 <sup>2</sup> cfu/g



However, we reserve the right to add the information, to correct or to delete it without prior notice.

- H www.hyundaibioland.co.kr
- T +82-43-249-6720.
- **F** +82-43-249-6709

<sup>\*</sup> Lillian C. Becker, MS, Wilma F. Bergfeld, MD, etc, 「Final Report of the Safety Assessment of Hyaluronic Acid, Potassium Hyaluronate, and Sodium Hyaluronate」, 「International Journal of Toxicology\_ Volume 28 Number 4S July/August 2009, p.5-67