## ${\bf Pharmaceutical\ Active\ Ingredients(API)\ \it /\ Additives(EXCIPIENT)}$

#### **Sodium Hyaluronate (HA)**

HA has the physical properties of high viscosity, outstanding moisture keeping ability, lubricating effect etc., and physiological functions of wound healing, protection against infection, collagen fiber biosynthesis etc.



Product name	Source	Certificates and registrations	Application	Shelf life (Storage condition)	Packing	Average molecular weight (kDa range)
Hyaluronsan HA-AML	Biofermentation	Japan GMP certificate     CEP     DMF: Japan, USA, China and Korea		36 months (2 ~ 8℃)	1kg×1 200g×1 50g×1	500~1,200
Hyaluronsan HA-SHL	Biofermentation	Japan GMP certificate     CEP     DMF: Japan, USA and China	Eye drop Ophthalmic viscosurgical device Knee injection	24 months (2 ~ 8℃)	1kg×1 200g×1 50g×1	1,500~3,900
Hyaluronsan HA-AM	Chicken comb	Japan GMP certificate     DMF : Japan, USA, China and Korea	Dermal Filler VUR / Interstitial cystitis Submucosal injection Resorbable adhesion barrier Wound healing agent	36 months (below 15℃)	1kg×1 200g×1 50g×1	600~1,200
Hyaluronsan HA-QSE	Chicken comb	Japan GMP certificate     DMF : Japan and Korea		24 months (2 ~ 8℃)	100g×1	1,900~3,900

<sup>%1</sup> Shelf life is based on the unopened condition after the production.

#### **HA Products Line-up**

Average Molecular weight (kDa range) **2	for pharmaceutical use	for cosmetic use	for food use	
1,900 ~ 3,900	Hyaluronsan HA-QSE	_	_	
1,500 ~ 3,900	Hyaluronsan HA-SHL	Hyaluronsan HA-LQH	_	
1,300	_		_	
1,200		Hyaluronsan HA-LQ	- Hyabest®(J)	
1,000				
800	Hyaluronsan HA-AM			
700	Hyaluronsan HA-AML			
600		Hyaloveil®-P		
500			- Hyabest®(S)LF-P	
200 ~ 400	_	_		
10 ~ 50	_	_	Hyabest®(S)LF5-A	
<10	_	Hyalo-Oligo® Hyalorepair®	_	
2	_	HAbooster	Hyabest®(A)	

Red letters: Chicken comb extraction product

Blue letters: Biofermentation

 $Hyalo\text{-}Oligo^{\otimes} and \ Hyabest^{\otimes}(S)LF5\text{-}A \ are \ "hyaluronic acid".$ 

Hyabest®(A) is "hyaluronic acid / sodium hyaluronate"

 $Hyaloveil ^{\circ}\text{-P and Hyalorepair} ^{\circ}\text{ are "chemically modified derivatives", the others are "sodium hyaluronate"}.$ 

### Egg Yolk Lecithin (Phospholipids)

The lipid composition of our products are very similar to that of human being (good affinity).

Used in pharmaceutical products such as fat emulsion, lipid micro-sphere (DDS), etc. as natural emulsifier. It could be applied for topical use pharmaceuticals

Product name	Certificates and registrations	Characteristics Application		Shelf life (Storage condition)	Packing			
Egg Yolk Lecithin PL-100M	DMF: USA and China	Purified egg yolk lecithin produced from egg yolk by Kewpie's original extraction and refining technology under strict process & product control.	Emulsifier used with such as; Intravenous fat emulsion Propofol Flbiprofen Diazepam	36 months	1kg×1			
Egg Yolk Lecithin PC-98N		Highly purified egg yolk lecithin made from egg yolk and refined almost pure Phosphatidylcholine under strict process & product control.  Emulsifier and Liposome material used with such as; Alprostadil (PGE-1) Amphotericin B Doxorubicin		(Below -20℃)	J			

X3 Shelf life is based on the unopened condition after the production.

# Strict manufacturing management system guarantees high quality



Goka Factory, Fine Chemical Division

JISQ9001:2015(ISO9001:2015) JISQ14001:2015(ISO14001:2015)



<sup>\*2</sup> The range of molecular weight should be just reference numbers and not the specifications.