

Hyabest[®] (S) LF-P

Sodium Hyaluronate

Kewpie Corporation

Hyabest[®] (S) LF-P is hyaluronic acid for food use, produced by fermentation and refined to high purity. It has high stability and suitable for making various foods, and dietary supplements.

WHAT IS HYALURONIC ACID ?

- Hyaluronic acid is one of the acidic mucopolysaccharides naturally existing in large quantity in vitreous humor, serum, skin, chicken comb, shark's fin and whale cartilage.
- The excellent water-holding capacity of hyaluronic acid improves physical property of foods and helps skin retain moisture.
Number of new products are expected to be launched into the market toward the future, utilizing such advantageous property of hyaluronic acid.
Those will include dietary skin-care products.

EXCELLENT FEATURES OF Hyabest[®](S) LF-P

This is high purity hyaluronic acid which is produced by fermentation method (non-animal source) and its excellent water holding capacity helps various foods improving their physical property.

This is also an ideal material of dietary supplements to supply hyaluronic acid of which natural synthesis in the body decreases by aging.

U S E

Hyabest[®](S) LF-P is an ideal material for nutritional drinks or dietary supplements and for improving physical properties of various foods. It can be used for making tablet products or granules.

SAFETY

- Acute oral toxicity in mice (LD50) Not less than 5,000mg/kg

The safety test results of our manufacturing product "Sodium Hyaluronate", produced by fermentation, are followings.

- Acceptable daily intake (ADI) 34 mg/kg/day (Based on Subacute (28-day) toxicity in rats)
- Ames test Negative

* "Hyabest(S)LF-P" and our manufacturing product "Sodium Hyaluronate" are both produced from the materials of the same origin and through the very similar production process.

SPECIFICATIONS AND A TYPICAL ANALYSIS

	Specifications	Analysis
Description	White to pale yellow powder, having a slight, characteristic odor.	Passed
Identification (1)	To 10mL of a sample solution (1 in 1,000) add 2 to 3 drops of a solution of cetylpyridinium chloride (1 in 20): a white precipitate is produced.	Positive
(2)	To 1mL of a sample solution (1 in 10,000) add 6mL of sulfuric acid and heat it in a water bath for 10 minutes. After cooling, add 0.2mL of carbazole TS, allow to stand: a red to red-purple color develops.	Positive
pH	5.0 ~ 7.0 (0.1+100)	6.3
Heavy Metals	NMT 20µg/g	NMT 20µg/g
Arsenic	NMT 1.5µg/g	NMT 1.5µg/g
Hemolytic Streptococcus	Negative	Negative
Hemolysis	A red blood corpuscle is precipitated and the top of the solution is clear. (Negative)	Passed
Assay (as Glucuronic Acid)	NLT 35 %	46 %
Hyaluronic Acid	NLT 95 % ◆	100 %
Loss on Drying	NMT 10 %	6 %
Crude Fat	NMT 0.2 %	NMT 0.1 %
Residue on Ignition	15 ~ 20 %	18 %
Kinematic Viscosity	Not more than 20 mm ² /s (0.2%, 30°C)	11mm ² /s
Aerobic plate counts	NMT 300/g	NMT 20/g
Coliforms	Negative	Negative
Mold and Yeast	NMT 100/g	NMT 50/g

◆ : Hyaluronic Acid content (%) (As hyaluronic acid and/or salts of hyaluronic acid : dry basis)
 = 100 - Protein content (%) - Crude Fat content (%)

STORAGE AND EXPIRY

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

Expiry : 36 months from manufacturing date. (unopened, at ordinary temperature)
 ※1month=30days

PACKING

100 g (in aluminum pouch) × 1 ~ 10 = 1 carton

1 kg (in aluminum pouch) × 1 ~ 10 = 1 carton

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