



# Hyaluronic acid sodium salt powder

ActiHyal is our premium range of food grade hyaluronic acid, available in a range of molecular weights that serve diverse applications in food, beverage, nutraceuticals, and nutricosmetics.

Hyaluronic acid plays an important role in the human body and has a wide range of applications into consumer products thanks to its unique physical and chemical properties. It has acritical role in moisture retention in your skin and in joint movement, and is also found in soft connective tissues including your gums and eyes.

#### Levels of hyaluronic acid

However, the levels of hyaluronic acid in your body **declines as you age**.



Your skin's hyalaronic acid content starts to decrease in as early as 20 years old, and is reduced to half by the age of 50. Alongside similar drops in collagen, this reductrion in hyularonic acid levels is linked to increased join pain, lower skin moisture, and the appearance of fine lines and wrinkles.



# Hyalaronic acid and Health











**Skin Hydration** 

**Dryness** 

Fine Lines & Wrinkles

Skin Tone

**Epidermal Thickness** 



# **ActiHyal Chemistry**

Hyaluronic acid is a biopolymer composed of repeating units of disaccharides, which include molecules of D-glucuronic acid and N-acetylglucosamine moleculeslinked by  $\beta$ - (1–4) and  $\beta$ - (1–3)glycosides with amolecular weight of approximately 400 Da.

An intact polysaccharide chains can be comprised of as many as 25,000 disaccharide units, corresponding to a molecular weight of up to 7 million Dalton (M Da).

CAS: EC Number
9067-32-7 618-620-0

Chemical Formula Molecular Weight
(C14H21NaNO11)n 403.31 g/ mol

IUPAC
(1→4)-(2-Acetamido-2-deoxy-D-gluco)-(1→3)-D-glucuronoglycan

Different molecular weights of hyaluronic acid influence its biological properties, absorption, and functional characteristics – each of which has a distinct implication for end applications.

#### Available in different forms

ActiHyal is a premium quality branded range of food grade hyularonic acid available in different forms based on molecular weight:

Hyaluronic acid sodium salt 99% powder [Food grade] [2.6 MDa] Hyaluronic acid sodium salt powder [Food grade] [0.8 MDa to 1.5 MDa] Hyaluronic acid sodium salt powder [Food grade] [0.5 MDa to 0.8 MDa] Hyaluronic acid sodium salt powder [Food grade] [50 kDa to 100 kDa1

Hyaluronic acid sodium salt powder [Food grade] [3 kDa to 8 kDa]

## Pair with



### **ActiHyal Benefits**

- ActiHyal is available in a range of molecular weights from very low (3 kDa) to high (2.6M Da)
- ZAll ActiHyal variations are produced via fermentation and are GMO-free and vegan
- Each variant of ActiHyal maintains a high purity level, with sodium hyaluronate assays consistently above 95.0%, ensuring premium quality.



