

Sodium Chondroitin Sulfate

— Japanese Pharmaceutical Codex (JPC) —

In 1950 Seikagaku Corporation was the first company to succeed in the industrial production of sodium chondroitin sulfate for pharmaceutical use.

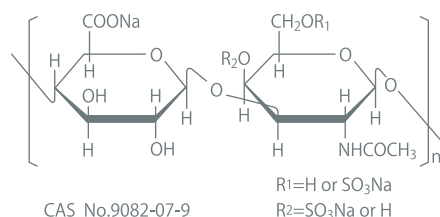
It is the original technology of extraction and refinement that is the key to the success. This technology produces the raw materials with high purity and high quality for pharmaceutical products and cosmetics for half a century and these raw materials continue to obtain high trust and reliability from many pharmaceutical and cosmetic companies.

Function

It is said that chondroitin sulfate is concerned with the retention of water and the adjustment of ionic composition of the extracellular environment and also with the ossification and the calcification. It is also said that chondroitin sulfate contributes to maintaining the flexibility and the physical strength of various tissues, the maintenance of the mobility, the pain relief of the joints and the maintenance of corneal transparency.

Chemical Structure

Sodium chondroitin sulfate has the structure of a sulfate bound to a sugar chain having repeats of two sugars, D-glucuronic acid and N-acetyl-D-galactosamine.



Application

Sodium chondroitin sulfate is widely used as raw materials for pharmaceutical products such as ophthalmological solution (eye-drop, etc.), metabolic drugs, energy foods (tablets, drinks, etc.) and cosmetics. In addition, sodium chondroitin sulfate is examined in a new application to the field of corneal preservation, regenerative medical products, etc.

Distribution

Sodium chondroitin sulfate is a kind of the glycosaminoglycan which is one of the main ingredients of the complex carbohydrate.

Sodium chondroitin sulfate is widely distributed in the human body, e.g. cartilage, bones, ligaments, corneas, blood vessels, etc. and it plays an important role to constitute the human tissues as a component of connective tissues.

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Products

Grade	N-K	ND-K
Origin	Shark	
Molecular Weight	approx.40,000	approx.20,000
Units	1kg or 5kg	1kg or 5kg
Use application	Injection, Eye-drop, Cosmetics, etc.	

Specifications

Test Item	Standard
1.Description	The product occurs as a white to pale yellow-brown powder. It is odorless or has a slight, characteristic odor and taste. It is freely soluble in water, and practically insoluble in ethanol, in acetone and in ether. The pH of a solution of Sodium Chondroitin Sulfate (1 in 100) is between 5.5 and 7.5. It is hygroscopic.
2.Identification	
1)Hexuronic Acid	A red to red-purple color
2)Acrinol reaction	A yellow precipitate
3)Qualitative reaction (1) of sulfate	A white precipitate, which does not dissolve upon addition of dilute nitric acid
4)Qualitative reaction (1) of sodium salt	A yellow color in the flame coloration test
3.Purity	
1)Clarity and color of solution	The solution is colorless or pale yellow and clear
2)Chloride	Not more than 0.142 %
3)Sulfate	Not more than 0.24 %
4)Heavy Metals(as Pb)	Not more than 20 ppm
5)Arsenic(as As ₂ O ₃)	Not more than 2 ppm
4.Loss on Drying	Not more than 10.0 %
5.Residue on Ignition	23.0 - 31.0%
6.Assay	
1)Nitrogen	2.5 - 3.8%
2)Sulfur	5.5 - 7.5%

Packaging

Primary package : Polyethylene bag
Secondary package : Metal can + Cardboard box
: Fiber drum

Storage Condition

Keep in airtight container,
Store at room temperature

Contact Address

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Manufacturer & Distributor



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May 2019 A