

Glucosamine sulfate Datasheet

5th Edition (Revised in January, 2017)

[Product Information]

Name: Glucosamine sulfateCatalog No.: CFN99193Cas No.: 29031-19-4Purity: >=98%M.F: C6H15NO9SM.W: 277.25Physical Description: Powder

Synonyms:D-Glucosamine Sulphate; Bis(2-ammonio-2-deoxy-D-glucose) sulfate;

2-Amino-2-deoxy-beta-D-glucopyranose sulfate.

[Intended Use]

- 1. Reference standards;
- 2. Pharmacological research;
- 3. Synthetic precursor compounds;
- 4. Intermediates & Fine Chemicals;
- 5. Others.

[<u>Source</u>]

Present in mucopolysaccharides and in polysaccharides found in bacteria, fungi, higher plants.

[Biological Activity or Inhibitors]

Glucosamine sulfate can stimulate proteoglycan synthesis by chondrocytes and has mild anti-inflammatory properties, it is therefore as effective as ibuprofen on symptoms of knee osteoarthritis (OA), suggests that glucosamine sulfate as a safe symptomatic Slow Acting Drug for OA.^[1]

Glucosamine sulfate can modulate the levels of aggrecan and matrix metalloproteinase-3 synthesized by cultured human osteoarthritis articular chondrocytes.^[2]

Glucosamine sulfate can reduce osteoarthritis progression in postmenopausal women with knee osteoarthritis.^[3]

[Solvent]

Pyridine, Methanol, Ethanol, etc.

[HPLC Method]^[4]

Mobile phase: CH₃COONa·3H2O-CH₃OH=90:10; Flow rate: 1.0 ml/min; Column temperature: Room Temperature; The wave length of determination: 340 nm.

[Storage]

 $2\text{-}8^\circ\!\mathbb{C}$, Protected from air and light, refrigerate or freeze.

[References]

[1] Müller-Fassbender H, Bach G L, Haase W, et al. Osteoarthritis Cartilage, 1994 Mar;

2(1):61-9.

- [2] Dodge G R, Jimenez S A. Osteoarthritis Cartilage., 2003 Jun; 11(6): 424-32.
- [3] Bruyere O, Pavelka K, Rovati L C, et al. Menopause., 2004 Mar-Apr; 11(2):138-43.
- [4] Chu L M, Xu JG, Huo L R. Journal of Pediatric Pharmacy, 2012,18(3):40-2.

[Contact]

Address:

S5-3 Building, No. 111, Dongfeng Rd., Wuhan Economic and Technological Development Zone, Wuhan, Hubei 430056, China Email: info@chemfaces.com Tel: +86-27-84237783 Fax: +86-27-84254680 Web: www.chemfaces.com Tech Support: service@chemfaces.com