



>>Entry Name: Xylan, 9CI, 8CI

CAS Registry Number: 9014-63-5

Related CAS Registry Numbers(s): 37319-17-8 116001-96-8

Molecular Formula: C₅H₈O₄

Molecular Weight: 132.116

Accurate Mass: 132.04226

Percentage Composition: C 45.46%; H 6.10%; O 48.44%

are extremely rare. Esparto grass D-xylan is an example. Polymeric. Minimum formula given

Biological Source: Occurs in all land plants and is a major component of hardwoods

Optical Rotation: $[\alpha]_{\text{D}}^{21} -92$ (c, 0.5 in 0.5N NaOH)

Fluka: 95590

>>Derivative: Poly(hydrogen sulfate)

Synonym(s): Pentosan polysulfate. Xylan hydrogen sulfate, 9CI. Xylan polysulfate. Fibrase. Hemoclar. Thrombocid. CB 8061. SP 54. Fibrezym. Cartrophen vet. PZ 68

CAS Registry Number: 37300-21-3

Use/Importance: Anticoagulant, antiinflammatory agent. Used in the treatment of interstitial cystitis. Plasminogen activator-releasing agent. Shows antithrombotic and antineoplastic activity. Inhibits accumulation of protease-resistant prion protein in a scrapie-infected cell line

Development Status: Approved by FDA (1996) (as sodium salt)

Optical Rotation: $[\alpha]_{\text{D}}^{20} -57$ (Na salt)

Other Data: Used as sodium salt (Pentosan polysulfate sodium, BAN, INN, USAN)

References:

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Adams, G.A., *Methods Carbohydr. Chem.*, 1965, **5**, 170, (synth)
Mizuno, T., *CA*, 1968, **68**, 3140k, (synth)
Zelenev, Yu.V. *et al.*, *CA*, 1968, **68**, 44624g, (pmr)
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Esquivel, C.O. *et al.*, *Thromb. Res.*, 1982, **28**, 389, (activity, polysulfate)
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MacGregor, I.R. *et al.*, *Thromb. Haemostasis*, 1984, **51**, 321, (metab, polysulfate)
Willuweit, B. *et al.*, *Naunyn-Schmiedeberg's Arch. Pharmacol.*, 1988, **337**, 354, (activity)
Kiesel, J. *et al.*, *Thromb. Res.*, 1991, **64**, 301, (pharmacol)
Zugmaier, G. *et al.*, *J. Natl. Cancer Inst.*, 1992, **84**, 1716, (pharmacol)
Labrousche, S. *et al.*, *Thromb. Haemostasis*, 1992, **68**, 556, (pharmacol)
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