

Glentham Life Sciences Ltd Unit 5 Leafield Way Corsham SN13 9SW United Kingdom

t: +44 (0) 1225 667 798 f: +44 (0) 2033 978 909 e: info@glentham.com w: www.glentham.com

Certificate of Analysis

Product Name Heparin sodium salt, Ph. Eur. grade Glentham Code GC9695 **CAS Number** 9041-08-1 MDL Number MFCD00081689 Additional CAS 9005-49-6 961ZSQ **Batch Number** 1090.86 Molecular Weight Molecular Formula ${\rm C_{24}H_{38}N_2O_{36}S_5}$ Storage Temp.

Property	Specification	Batch 961ZSQ
Physical Description	White or almost white, hygroscopic powder	Conforms
Identification	A, B, C, D, E: According to EP	Conforms
Appearance of Solution	Clear, and colour ≤ Y5	Conforms
рН	5.5 - 8.0	6.8
Nucleotidic impurities	≤ 0.15 (at 260nm)	0.02
Protein	≤ 0.5% (anhydrous)	≤ 0.1%
Related Substances	Sum of Dermatan Sulfate and Chondroitin Sulfate: ≤ 2.0%	≤ 0.1%
	Any other impurity: According to EP	Conforms
Nitrogen	Any other impurity: According to EP 1.5 - 2.5 % (anhydrous)	Conforms 2.1%
Nitrogen Sodium	, , ,	
	1.5 - 2.5 % (anhydrous)	2.1%
Sodium	1.5 - 2.5 % (anhydrous) 10.5 - 13.5 % (anhydrous)	2.1% 12.3%
Sodium Loss on Drying	1.5 - 2.5 % (anhydrous) 10.5 - 13.5 % (anhydrous) ≤ 8.0%	2.1% 12.3% 2.8%
Sodium Loss on Drying Bacterial Endotoxins	1.5 - 2.5 % (anhydrous) 10.5 - 13.5 % (anhydrous) ≤ 8.0% 0.01 IU max per IU Heparin	2.1% 12.3% 2.8% Conforms
Sodium Loss on Drying Bacterial Endotoxins Total Aerobic Microbial Count	1.5 - 2.5 % (anhydrous) 10.5 - 13.5 % (anhydrous) ≤ 8.0% 0.01 IU max per IU Heparin ≤ 10CFU/g	2.1% 12.3% 2.8% Conforms ≤ 10CFU/g

Specification Version v1.1

Manufacture Date 2022-06-09

Re-Test Date 2027-08-04

Glentham Life Sciences confirm that the above referenced product conformed to the information displayed in this document on the quality release date. Please check www.glentham.com or contact us using the details above for the current version of this document.

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