

Errata Notice

This document contains references to PSS or Polymer Standards Service. Please note that PSS is now Agilent. This document will be republished as an Agilent document in the future.



A part of Agilent

10090 - Column Application Note Characterization of Dextran Sulfate

Dextran sulfate (DS) is a heparin-like polysaccharide containing approximately 17% sulfur and up to three sulfate groups per glucose molecule. DS is prepared from reaction of chlorosulfuric acid with dextran in pyridine. It is used in ionic two phase separation systems for separation, fractionation and enrichment of proteins, nucleic acids and as a substitute of heparin for coagulation inhibition.

Experimental Setup

Mobile Phase:	Water Sodium nitrate 0.1M
Stationary Phase:	PSS SUPREMA
Flow rate [mL/min]:	1,00
Temperature [°C]:	35
Detection:	Shodex-RI71
Calibration:	Kit Pullulan
Data processing:	PSS WinGPC

Recommendations for Sample Concentration

narrow PDI	
M 100 Da - 10 000 Da:	2 g/L
M 10 000 Da - 1 000 000 Da:	1-2 g/L
M > 1 000 000 Da:	0.5 g/L or less
broad PDI (>1.5)	
all molar masses:	3.0 - 5.0 g/L
Injection volume [µL]:	100

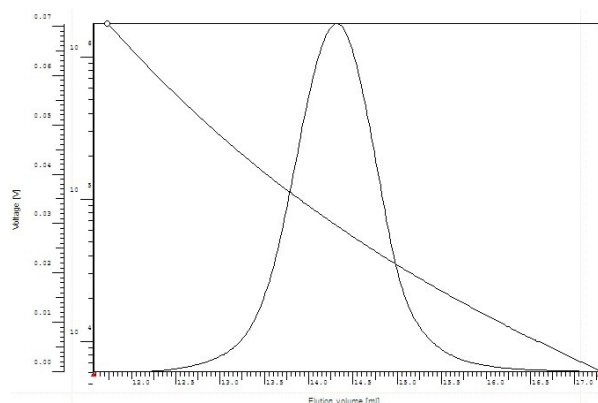
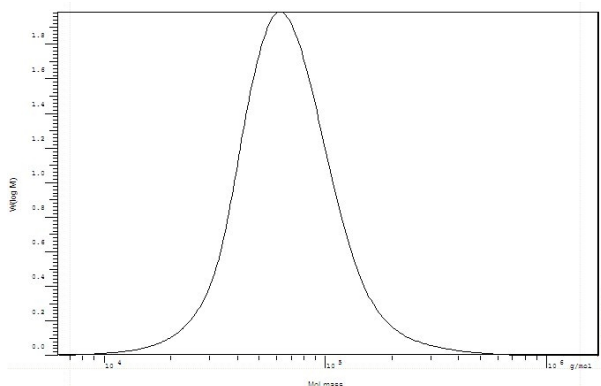


Suitable Columns

low molecular weights:	P/N 206-0001 (set of 3) OR sua083005lis (1 linear)
medium molecular weights:	P/N 206-0002 (set of 3) OR sua083005lim (1 linear)
high molecular weights:	P/N 206-0003 (set of 3) OR sua083010lxl (1 linear)
ultrahigh molecular weights:	P/N 206-0004 (set of 3) OR sua083010luh (1 linear)

Elugram and Calibration separation on PSS SUPREMA

Molar Mass Distribution separation on PSS SUPREMA



PSS Polymer Standards
Service GmbH
In der Dalheimer Wiese 5
55120 Mainz | Germany

Phone +49 6131 96239-0
Fax +49 6131 96239-11
E-Mail info@pss-polymer.com
Web www.pss-polymer.com

Polymer Standards
Service-USA, Inc.
160 Old Farm Rd, Suite A
Amherst | MA 01002 | USA

Phone +1 413 835-0265
Fax +1 413 835-0354
E-Mail pssusa@pss-polymer.com
Web www.pss-polymer.com

DE00351346

5994-6306EN
July 1, 2023