

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.



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10272 - Column Application Note Characterization of high molar mass Gelatin

Gelatin is a polypeptide that is produced from hydrolysis of collagenes in skin and bones. It is obtained from acidic or from basic hydrolysis and contains poly amino acids. Gelatin is used in food, beverage and in pharmaceutical industry as stabilizer for tablets and many other applications.

Experimental Setup

Mobile Phase:	Phosphate buffer pH 6.6 Sodium chloride 0.3M
Stationary Phase:	PSS PROTEEMA
Flow rate [mL/min]:	1,00
Temperature [°C]:	25
Detection:	GPC1100 Refractive index
Calibration:	Kit Pullulan
Data processing:	PSS WinGPC

Recommndations for Sample Concentration

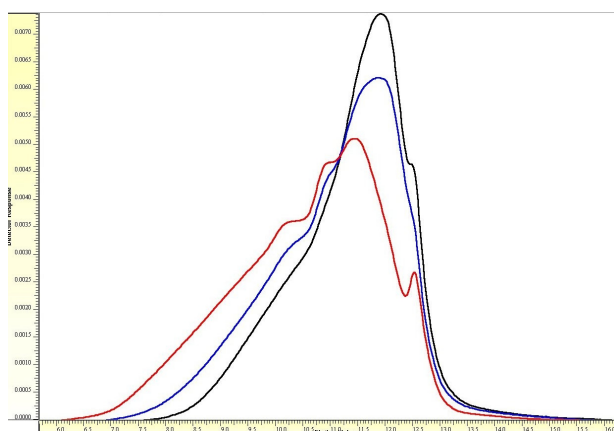
narrow PDI	
M 100 Da - 10 000 Da:	2 g/L
M 10 000 Da - 1 000 000 Da:	1-2 g/L
M > 1 000 000 Da:	0.5 g/L or less
broad PDI (>1.5)	
all molar masses:	3.0 - 5.0 g/L
Injection volume [μ L]:	20



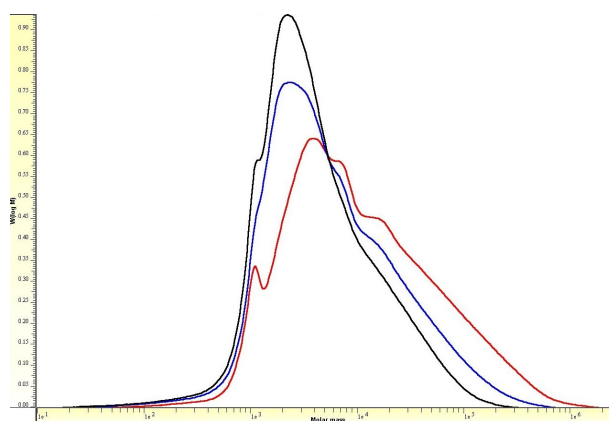
Suitable Columns

low molecular weights:	P/N pra080505 and 2x pra0830051e2
medium molecular weights:	P/N pra080505 and pra0830053e2
high molecular weights:	P/N pra080505 and 2x pra0830051e3
ultrahigh molecular weights:	-

Elugram: Three different Gelatins separation on PSS PROTEEMA



Molar Mass Distribution separation on PSS PROTEEMA



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