

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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10031 - Column Application Note Characterization of Poly(methyl methacrylate)

Poly(methyl methacrylates (PMMA) and copolymers with a high content of PMMA are used in plastics applications. PMMA is a thermoplastic and transparent material and is commonly called acrylic glass or simply acrylic. The material is often used as an alternative to glass.

Experimental Setup

Mobile Phase:	Tetrahydrofuran
Stationary Phase:	PSS SDV
Flow rate [mL/min]:	1,00
Temperature [°C]:	25
Detection:	Shodex-RI71
Calibration:	ReadyCal-Kit Poly(methyl methacrylate)
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)

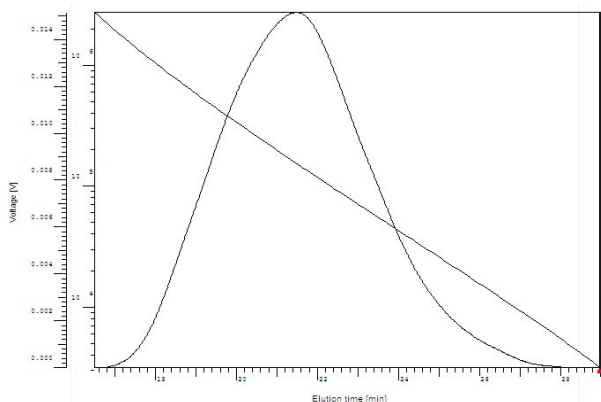
all molar masses:	3.0 - 5.0 g/L
Injection volume [µL]:	100



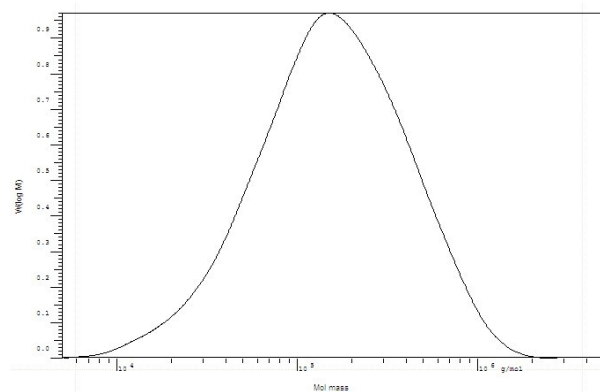
Suitable Columns

low molecular weights:	P/N 201-0001 (set of 3) OR sda083003lis (1 linear)
medium molecular weights:	P/N 201-0002 (set of 2) OR sda083005lim (1 linear)
high molecular weights:	P/N 201-0003 (set of 3) OR sda083005lxl (1 linear)
ultrahigh molecular weights:	P/N 202-0001 (set of 3)

Elugram and Calibration separation on PSS SDV



Molar Mass Distribution separation on PSS SDV



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