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.





10025 - Column Application Note **Characterization of Poly(styrene)**

Poly(styrene) (PS) is prepared by polymerisation of styrene. It is resistant against acids, bases, alcohols, and mineral oil. Many products are made from Poly(styrene) by extrusion. After foaming heat resistant materials are obtained. The PS family, including many PS-copolymers, dominates the plasetics market for many applications.

Experimental Setup

Mobile Phase: Stationary Phase: Tetrahydrofuran PSS SDV Flow rate [mL/min]: 1,00 Temperature [°C]: 25

Shodex-RI71 Detection:

Calibration: ReadyCal-Kit Poly(styrene)

Data processing: **PSS WinGPC**

Recommandations for Sample Concentration

narrow PDI

M 100 Da - 10 000 Da: 2 g/L 1-2 g/L M 10 000 Da - 1 000 000 Da:

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

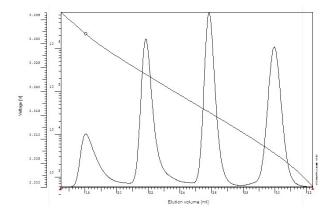
Suitable Columns

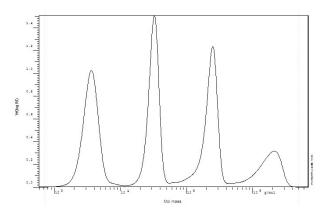
low molecular weights: P/N 201-0001 (set of 3) OR sda083003lis (1 linear) P/N 201-0002 (set of 2) OR sda083005lim (1 linear) medium molecular weights: P/N 201-0003 (set of 3) OR sda083005lxl (1 linear) P/N 202-0001 (set of 3) high molecular weights:

ultrahigh molecular weights:

Elugram and Calibration separation on PSS SDV

Molar Mass Distribution separation on PSS SDV







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