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.

# 10286 - Column Application Note

Characterization of Methyl Cellulose





Methyl cellulose (MC) is the methyl ether of the cellulose. MC is available as white and slightly yellow powder in various viscosity ranges. The molar degree of substitution varies from 0,7 (water soluble) up to 2,3 (org. solvents).

#### **Experimental Setup**

Mobile Phase: Stationary Phase: Flow rate [mL/min]: Temperature [°C]: Detection: Calibration: Data processing: Dimethylsulfoxide Lithium bromide 5g/l PSS GRAM 1,00 60 GPC1100 Refractive index ReadyCal-Kit Poly(methyl methacrylate) PSS WinGPC

## **Recommandations for Sample Concentration**

narrow PDI M 100 Da - 10 000 Da: M 10 000 Da - 1 000 000 Da: M > 1 000 000 Da: broad PDI (>1.5) all molar masses: Injection volume [µL]:

## Suitable Columns

low molecular weights: medium molecular weights: high molecular weights: ultrahigh molecular weights: 2 g/L 1-2 g/L 0.5 g/L or less

3.0 - 5.0 g/L 20

P/N 208-0001 (set of 3) P/N 208-0002 (set of 3) OR ama083010lin (1 linear) P/N 208-0003 (set of 3) P/N 208-0004 (set of 3)

# Elugram overlay of different methyl celluloses

separation on PSS GRAM



#### The molar mass information is based on PMMA calibration. separation on PSS GRAM





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