Analysis of Nitrocellulose

Application Note

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Introduction

The operating range of Agilent PLgel 10 µm MIXED-B columns makes them ideal for the separation of polymers that contain slightly higher than average molecular weight, such as nitrocellulose. The filtering of such samples prior to injection is recommended and sample concentrations should be low to avoid viscous shearing effects.

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PLgel 10 µm MIXED-B columns are designed for high MW polymer analysis and demanding eluent conditions. The PLgel 10 µm MIXED-B spans a wide range of molecular weights, up to 10 million, with a linear calibration curve. It is particularly useful for molecular weight distributions where slightly higher than average MWs are encountered. The 10 µm particle size provides good resolution with relatively low pressures for enhanced lifetimes in demanding conditions.

Conditions

Columns: 2 x PLgel 10 µm MIXED-B, 300 x 7.5 mm (p/n PL1110-6100)
Eluent: THF
Flow Rate: 1.0 mL/min
Loading: 0.1%, 200 µL
Detection: RI

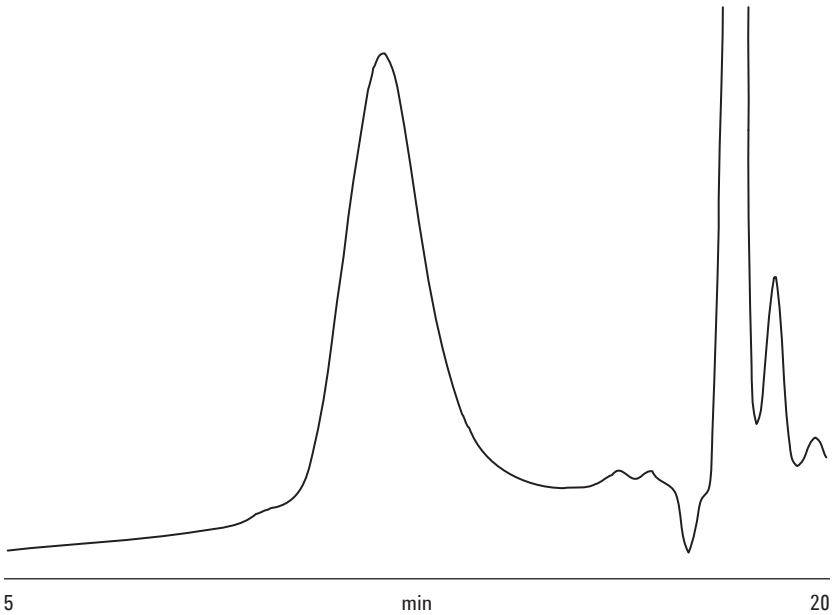

Figure 1. Analysis of nitrocellulose using PLgel 10 µm MIXED-B columns

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