Routine Analysis of Polystyrene

Application Note

Materials Testing & Research, Polymers

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Introduction

With a minimum of 35,000 plates per meter, a three column Agilent PLgel MIXED-B set is ideal for routine analysis of polystyrene. This polystyrene has a MW 250,000 and a polydispersity of 2.5. Some low MW components are detected with UV at 254 nm.

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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: 3 x PLgel 10 µm MIXED-B, 300 x 7.5 mm (p/n PL1110-6100)
Eluent: THF
Flow Rate: 1.0 mL/min
Detection: UV, 254 nm

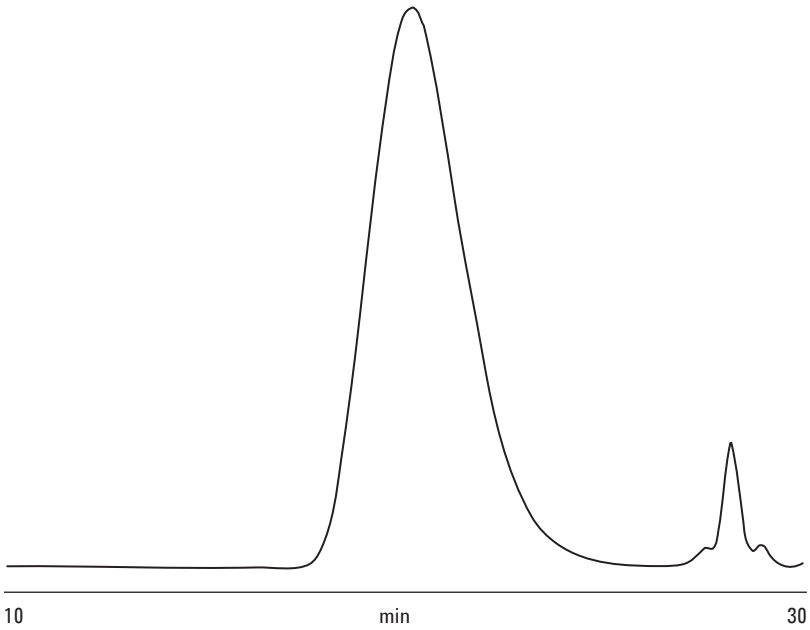

Figure 1. Analysis of polystyrene using PLgel 10 µm MIXED-B columns

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