Analysis of Polystyrene

Application Note

Materials Testing and Research, Polymers

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Introduction

A set of three Agilent PLgel MiniMIX-B columns is ideal for routine analyses of polystyrene in tetrahydrofuran.

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1260 Infinity
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This sample has Mw=250,000 and Mn=100,000, and some low molecular weight components are detected with a UV at 254 nm.

PLgel 10 µm MiniMIX-B columns are designed for high MW polymer analysis and demanding eluent conditions. The PLgel 10 µm MiniMIX-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.

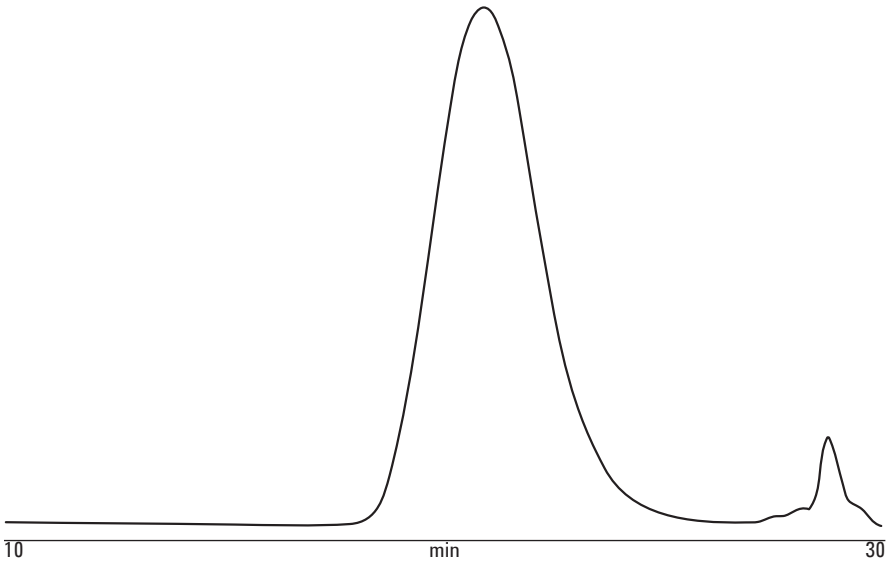

Figure 1. Analysis of polystyrene using PLgel 10 µm MiniMIX-B columns

Conditions

Column:	3 x PLgel 10 µm Mini-MIX-B, 300 x 7.5 mm (part number PL1510-5100)
Eluent:	THF
Flow Rate:	0.3 mL/min
Detection:	UV, 254 nm

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