Add a Column to Improve GPC Resolution

Agilent PLgel 10 µm MIXED-B Columns

Technical Overview

Introduction

Resolution in GPC is improved by the addition of extra columns due to an increase in system efficiency and a decrease in the slope of the calibration curve. These effects are demonstrated in the separation of Agilent EasiCal polystyrene standards, on PLgel MIXED-B columns.

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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 8–10 µm particle size provides good resolution with relatively low pressures for enhanced lifetimes in demanding conditions.

Conditions

Columns: (a) 1 x PLgel 10 µm MIXED-B, 300 x 7.5 mm
(b) 3 x PLgel 10 µm MIXED-B, 300 x 7.5 mm
(part number PL1110-6100)
Eluent: THF
Flow Rate: 1.0 mL/min
Detection: RI

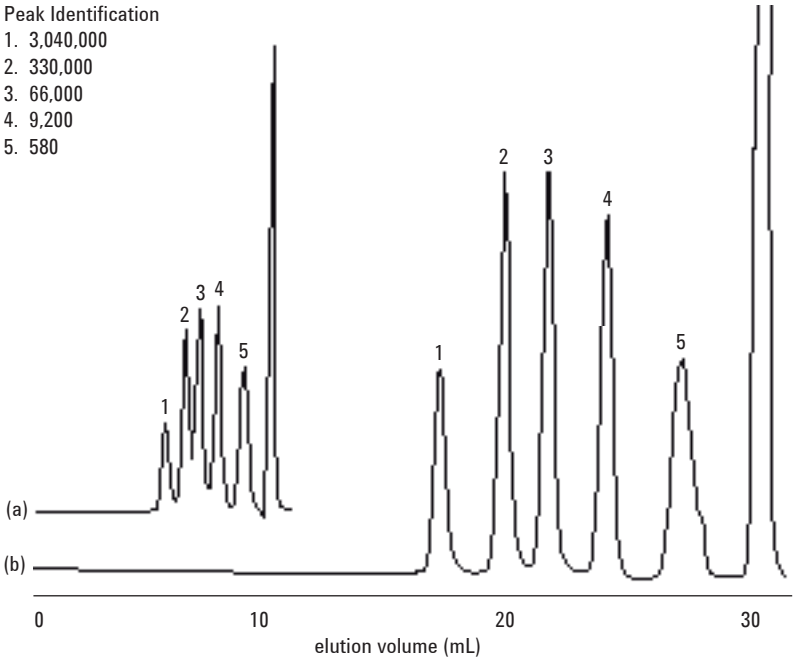

Figure 1. Separation of EasiCal polystyrene standards on PLgel MIXED-B columns

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