Analysis of Reacetylated Polyvinyl Alcohol

Application Note

Materials Testing & Research, Polymers

Authors

Greg Saunders, Ben MacCreath
Agilent Technologies, Inc.

Introduction

Polyvinyl alcohols (PVOH) are water soluble polymers, which can be analyzed by aqueous size exclusion chromatography (SEC). However, if reacetylated, the resultant polyvinyl acetate (PVAc) is rendered THF soluble, and so Agilent PLgel MIXED-B columns are the columns of choice.

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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: 0.25%, 100 µL
Detection: RI

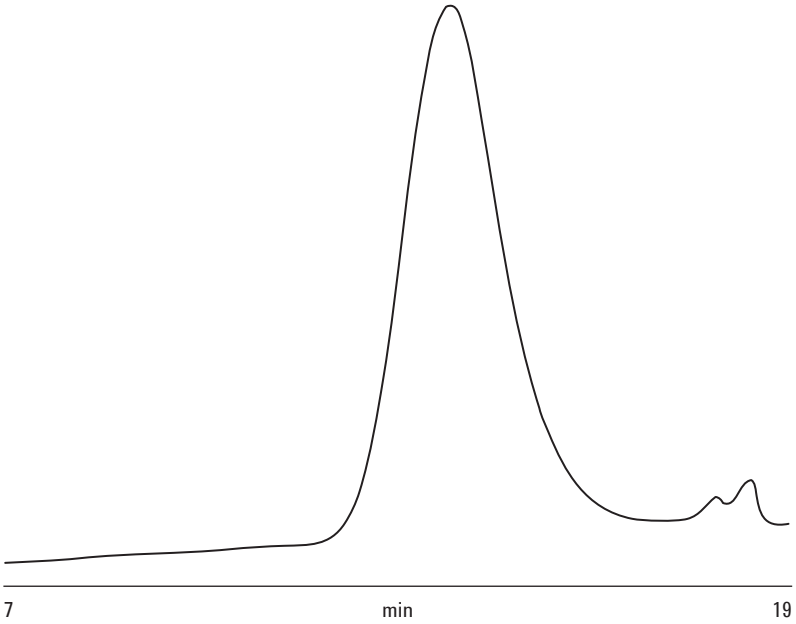

Figure 1. Analysis of reacetylated poly(vinyl) alcohol using PLgel MIXED-B columns

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