Effective Polybutadiene Analysis
Agilent PLgel 5 µm MIXED-D Columns

Technical Overview

Introduction

Relatively low molecular weight polybutadiene elutes well within the range of PLgel MIXED-D columns. The PLgel 5 µm MIXED-D column is specifically designed for the analysis of polymers, paints and resin systems where material above 400,000 MW is unlikely to be present. High pore volume, concentrated in this operating range, combined with the 5 µm efficiency, provides excellent resolution for low MW polymers and oligomers. Two, or even three, PLgel 5 µm MIXED-D columns are the perfect replacement for the popular 10^4/500 Å or 10^4/10^3/500 Å/100 Å column combinations.

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When calculated, the Mw was found to be 18,700 relative to polystyrene standards.

Column:	2 x PLgel 5 µm MIXED-D, 300 x 7.5 mm (part number PL1110-6504)
Eluent:	THF
Flow Rate:	1.0 mL/min
Detection:	RI

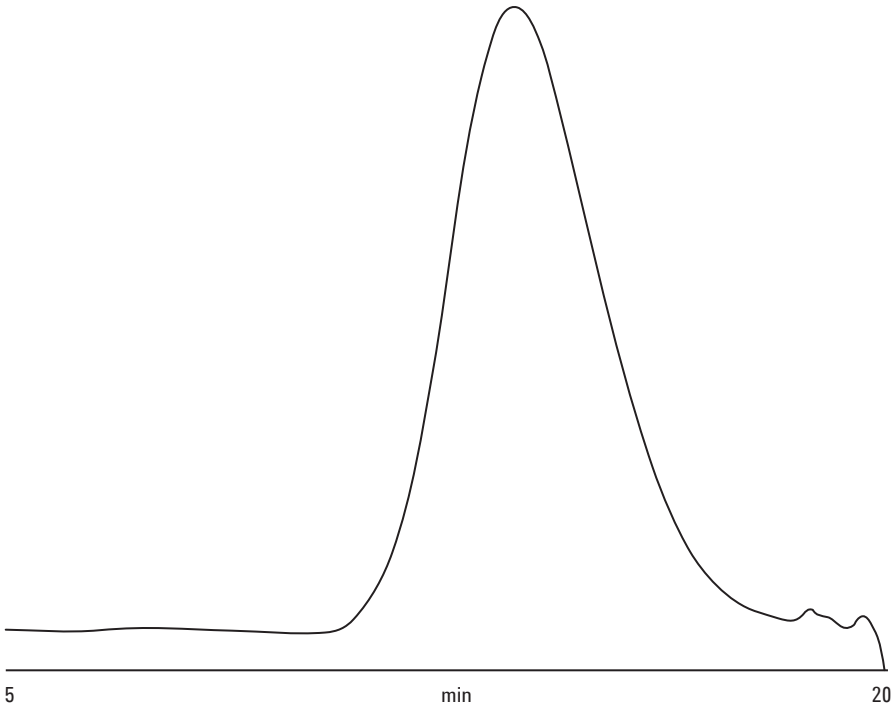

Figure 1. Analysis of polybutadiene using a PLgel MIXED-D column set

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