Easy Calibration of Agilent OligoPore Columns (PS, PMMA)

Technical Overview

Introduction

OligoPore columns make use of an innovative new medium that exhibits significantly increased pore volumes compared to conventional low pore size columns for gel permeation chromatography, resulting in higher resolution in the oligomeric region.

OligoPore columns have been specifically designed for the analysis and fingerprinting of oligomeric distributions. Both the low molecular weight Agilent polymethylmethacrylate (PMMA) and Agilent polystyrene (PS) molecular weight standards are composed of oligomer distributions. These ascend through oligomers, each with an additional repeat unit of relative molecular weight 100 (PMMA) or 104 (PS). Assigning the individual oligomers during calibration allows the low molecular weight region of the OligoPore calibration to be characterized.

Agilent Technologies

Figure 1 shows overlaid chromatograms of polystyrene 580 and polymethylmethacrylate 620. The oligomer distribution for both materials is clearly evident, illustrating that OligoPore columns can be calibrated with either polystyrene or polymethylmethacrylate at low molecular weight.

Conditions

Columns:	2 x OligoPore, 300 x 7.5 mm (p/n PL1113-6520)
Samples:	Polyethylene 580 and polymethylmethacrylate 620, 0.1 % (w/v)
Eluent:	THF
Flow Rate:	1.0 mL/min
Injection Volume:	100 µL
Detection:	RI

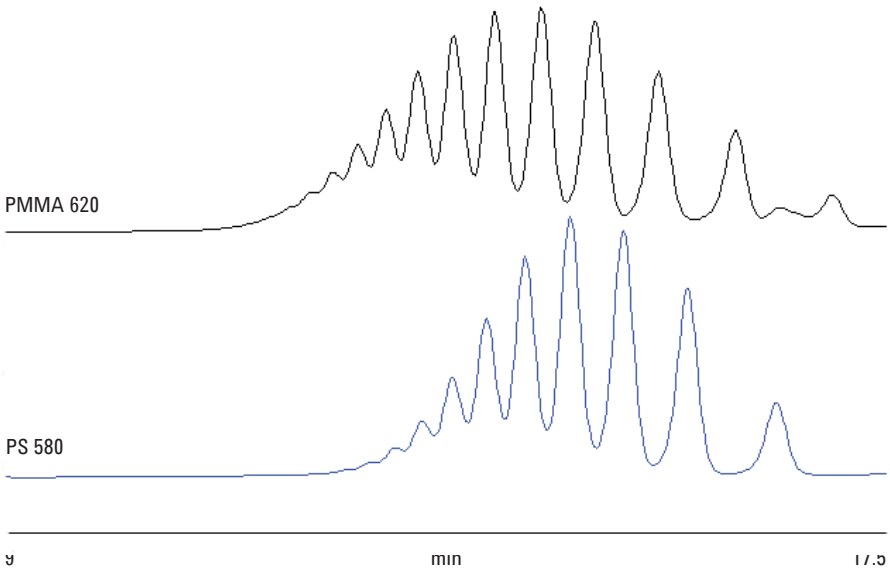

Figure 1. Overlaid chromatograms of polystyrene 580 and polymethylmethacrylate 620

These data represent typical results. For further information, contact your local Agilent Sales Office.

www.agilent.com/chem

This information is subject to change without notice.
© Agilent Technologies, Inc. 2010
Published in UK, September 20, 2010
SI-01733

Agilent Technologies