Calibration Curves
Agilent PLgel MiniMIX Columns

Technical Overview

Introduction

Narrow bore GPC columns from Polymer Laboratories, now a part of Varian, Inc., offer high performance, excellent solvent compatibility and mechanical stability. These columns can be used with conventional GPC equipment and provide high performance, comparable to PL's conventional ID columns, the benefit of ~ 70 % reduction in solvent consumption, increased operator safety and reduced solvent disposal costs.

To maintain the same linear velocity through the column, the volumetric flow rate must be reduced to 0.3 mL/min, in line with the column cross sectional area. This provides significantly lower solvent consumption. Sample loadings are scaled down in line with the reduced column volume, and system dead volume minimized to avoid excessive band broadening.

Agilent Technologies

Figure 1 shows a set of GPC calibration curves for the PLgel MiniMIX column range.

Conditions

Columns:
PLgel 20 µm MiniMIX-A, 250 x 4.6 mm
(part number PL1510-5200)
PLgel 10 µm MiniMIX-B, 250 x 4.6 mm
(part number PL1510-5100)
PLgel 5 µm MiniMIX-C, 250 x 4.6 mm
(part number PL1510-5500)
PLgel 5 µm MiniMIX-D, 250 x4.6 mm
(part number PL1510-5504)
PLgel 3 µm MiniMIX-E, 250 x 4.6 mm
(part number PL1510-5300)
Eluent: THF
Flow Rate: 0.3 mL/min
Detection: UV, 254

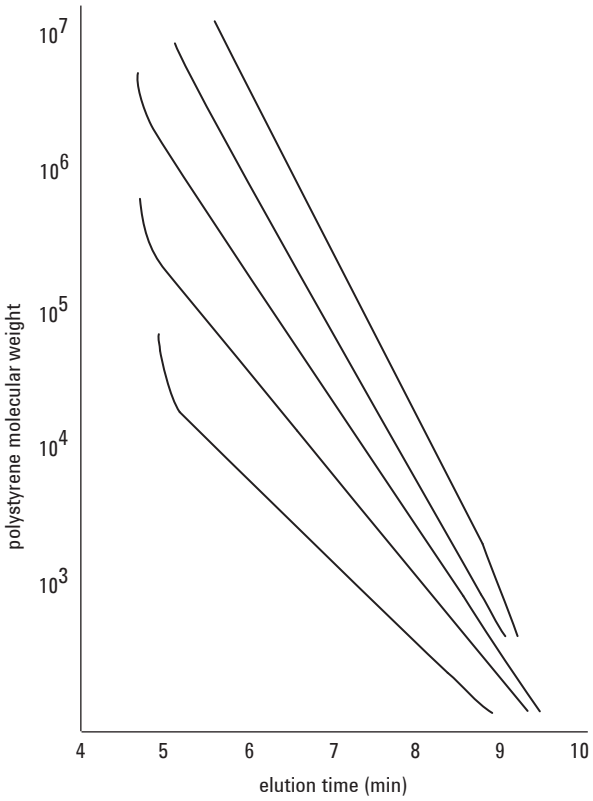

Figure 1. Set of GPC calibration curves for the PLgel MiniMIX column range

www.agilent.com/chem

This information is subject to change without notice.
© Agilent Technologies, Inc. 2010
Published in UK, September 22, 2010
SI-01747

Agilent Technologies