

Agilent EasiCal Polystyrene Standards for Individual Pore Size GPC/SEC Columns

Technical Overview

Introduction

The Agilent EasiCal system for organic solvents consists of two different combs, each with 10 detachable spatulas supporting a mixture of five polymer standards. The thin film of polymer (approximately 5 mg) on the tip of the PTFE spatulas rapidly dissolves when immersed in eluent to provide two calibration solutions for gel permeation chromatography/size exclusion chromatography. A single pack provides 10 spatulas of each type, with molecular weights selected to provide equidistant calibration points for greater accuracy.

Conditions

Calibrants Agilent EasiCal PS-1 Polystyrene Standards

Columns Agilent PLgel 10 μ m 10⁶Å, 300 × 7.5 mm (p/n PL1210-6160)

Agilent PLgel 10 μ m 10⁴Å, 300 × 7.5 mm (p/n PL1210-6140)

Agilent PLgel 10 µm 500Å, 300 × 7.5 mm (p/n PL1210-6120)

Eluent THF

Flow rate 1.0 mL/min
Conc 0.05%

Detector IIV 254 nm

System Agilent PL-GPC 50

GPC/SEC Columns and Calibrants from Agilent

Agilent offers a comprehensive portfolio of GPC/SEC columns and calibrants for highperformance separations based on molecular size in solution. Agilent delivers leading solutions for characterizing and separating polymers by GPC/SEC, and manufactures all components for accurate polymer analysis.

Look at the Agilent Literature Library on www.agilent.com/chem/gpc-sec for a comprehensive range of application notes and technical overviews to help you get the best from your Agilent GPC/SEC columns and instruments.

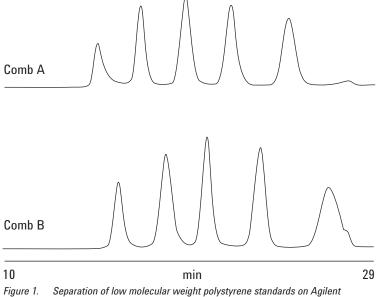


Figure 1. Separation of low molecular weight polystyrene standards on Agilen. PLgel 10 μm columns.

Table 1. Agilent EasiCal Standards

Comb A MW mixture	Comb B MW mixture
8,500,000	3,040,000
1,030,000	330,000
156,000	66,000
28,500	9,200
3,250	580

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