

# Effect of Particle Size on Oligomer Separation Using Agilent PLgel and GPC/SEC

## Technical Overview

### Introduction

As predicted by the Van Deemter equation, as the particle size of a column is decreased, so the resolution improves. The operating pressure will increase as the particle size of the packing is reduced. This effect is demonstrated using Agilent PLgel columns with three different particle sizes.

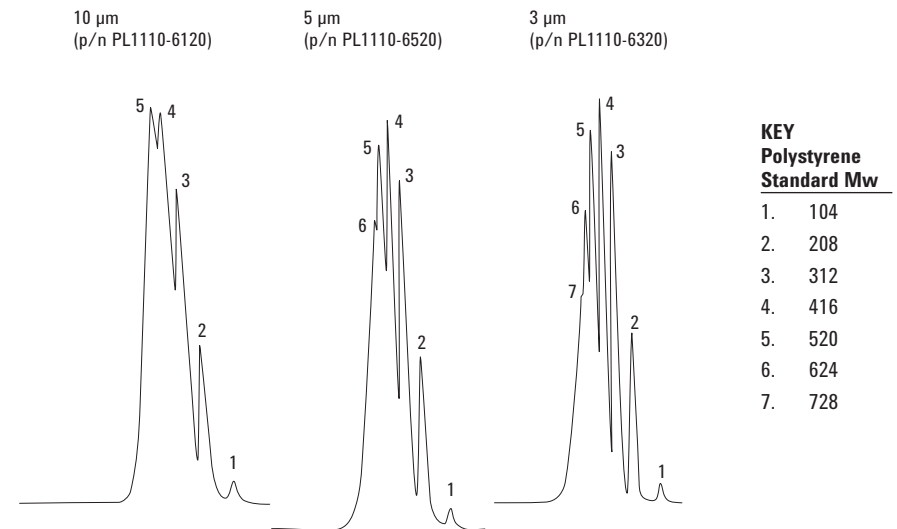


Figure 1. Separation of polystyrene standards on Agilent PLgel columns with different particle sizes.



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## Conditions

Calibrants	Agilent Polystyrene Standard 480
Columns	Agilent PLgel 100Å, 300 × 7.5 mm
Eluent	THF
Flow rate	1.0 mL/min
Detector	RI
System	Agilent PL-GPC 50

## GPC/SEC Columns and Calibrants from Agilent

Agilent offers a comprehensive portfolio of GPC/SEC columns and calibrants for high-performance 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.

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