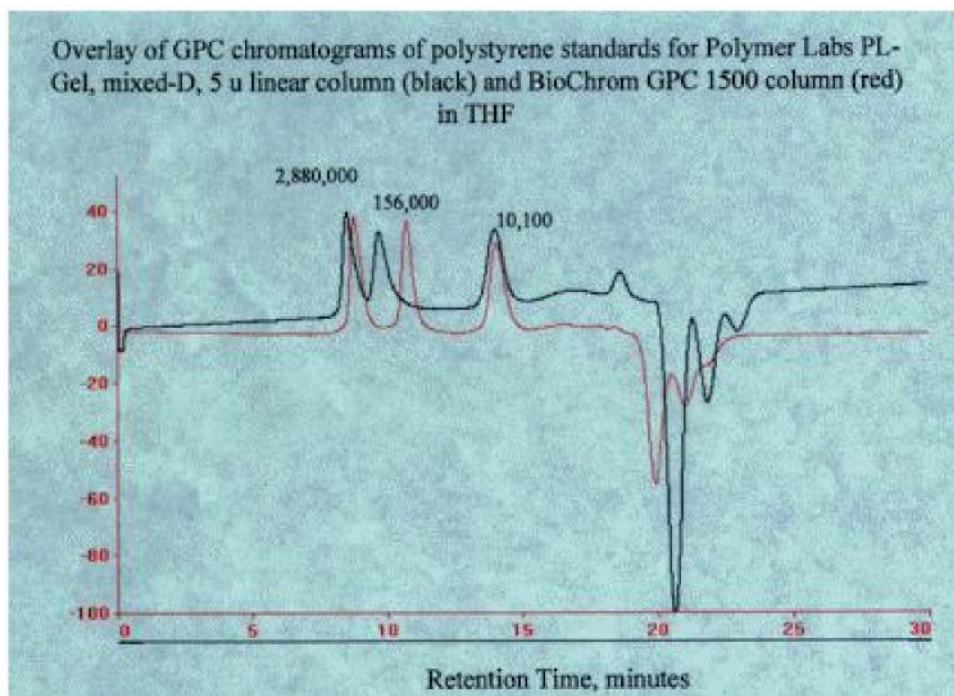


Size Exclusion HPLC Columns

Size exclusion chromatography (SEC) is the most practical method of characterizing the molecular weight (MW) and molecular weight distribution of synthetic polymers, biopolymers and natural polymers. It is also known as gel permeation chromatography (GPC) or gel filtration chromatography (GFC). The pore size, pore size distribution and pore volume of media of size exclusion column have great effects on the separation of polymers. **Hydrocell GPC 1500 column** is produced from a single batch of wide pore distribution of polystyrene-divinylbenzene (PS-DVB) beads with the average particle size of about 10 μm . It will provide more consistent results of analysis and separation of synthetic polymers.

HYDROCELL GPC 1500, 10 μm	Agilent PL -Gel, Mixed-D, 5 μm Linear
Column Size: 7.8 x 300 mm Sample: Polystyrene Standard Eluent: THF Detection: RI Detector Flow Rate: 0.5 mL / min	Column Size: 11.2 x 300 mm Sample: Polystyrene Standard Eluent: THF Detection: RI Detector Flow Rate: 0.5 mL / min



Overlay of GPC chromatograms of polystyrene standards for Agilent PL-gel, mixed-D, 5 μm linear column (black) and BioChrom GPC 1500 column (red) in **THF**.

Hydrocell GPC 3000 Column is produced from a single batch of wide macropore of polystyrene-divinylbenzene beads with the average particle size of 10 μm . The column is designed for analysis and purification of high molecular weight of synthetic polymers. **High speed GPC 3000 HS, 150 x 7.8 mm column** is designed for high through-put analysis and purification of high molecular weight synthetic polymers at 3 to 5 minutes.

The major advantages of the HYDROCELL GPC 3000 size exclusion column are:

- *High Speed Separation of Polymers (3 to 5 Min)*
- *High Resolution for High Molecular Weight of Synthetic Polymers*
- *Single Batch of Wide Macropore Polymer Beads*
- *High Pore Volume*

Hydrocell GPC 3000 HS

Polystyrene Standard

Column: 150 x 7.8 mm

Mobile Phase: Tetrahydrofuran

Flow Rate: 1.0 mL/min

Detection: UV 254 nm

Peak Identification:

Polystyrene Standard in 1 mL THF

1. M.W. 1,000,000 (1 mg)
2. M.W. 218,800 (1 mg)
3. M.W. 21,000 (1 mg)

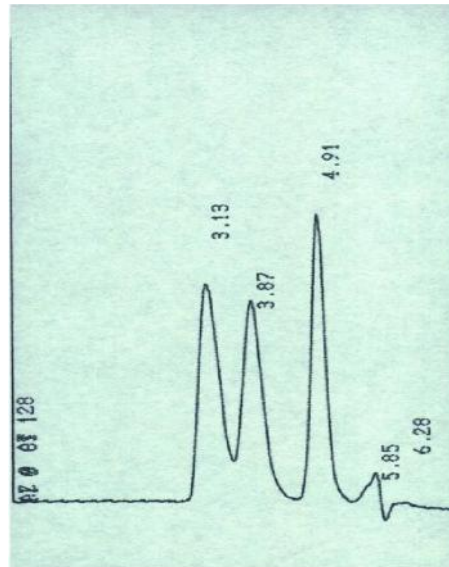


Fig. 4 - The Calibration Curve of Hydrocell GPC 3000 HS, 150x7.8 mm, 1mL/min

