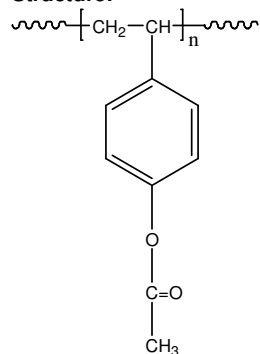


Sample Name: Poly(4-Acetoxy styrene)

Sample #: **P5510-4AcS**

Structure:

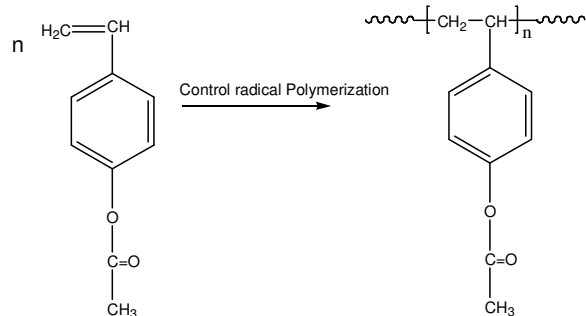


Composition:

$M_n \times 10^3$	PDI
10.5	1.6

Synthesis Procedure:

Poly(4-acetoxy styrene) is synthesized by control radical polymerization. The reaction scheme is shown below.



Characterization:

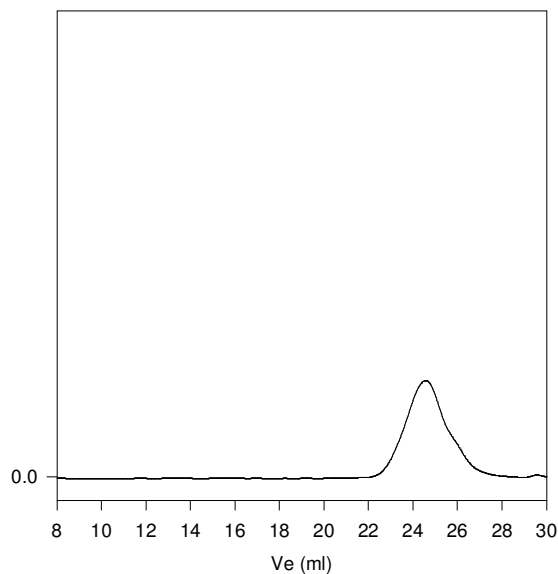
The molecular weight and polydispersity index (PDI) are obtained by size exclusion chromatography (SEC) in THF. SEC analysis was performed on a Varian liquid chromatograph equipped with refractive and UV light scattering detectors. Three SEC columns from Supelco (G6000-4000-2000 HXL) were used with triple detectors from Viscotek Co.

Solubility:

Polymer is soluble in DMF, THF, toluene and CHCl_3 . It precipitates from methanol, ethanol, water and hexanes.

SEC of Homopolymer:

P5510-4AcS



Size Exclusion Chromatogram of poly 4-acetoxy styrene:

— $M_n=10,500$, $M_w=16,800$, $M_w/M_n=1.6$