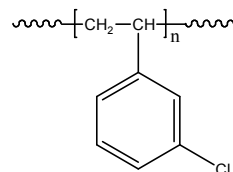


Sample Name: Poly(3-chloro styrene)

Sample #: P4933-3C1S

Structure:

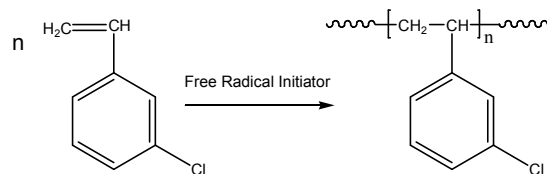


Composition:

$M_n \times 10^3$	PDI
6.0	1.2

Synthesis Procedure:

Poly(3-chloro styrene) is synthesized by controlled radical polymerization of 2-chloro styrene and the reaction scheme is shown below.



Characterization:

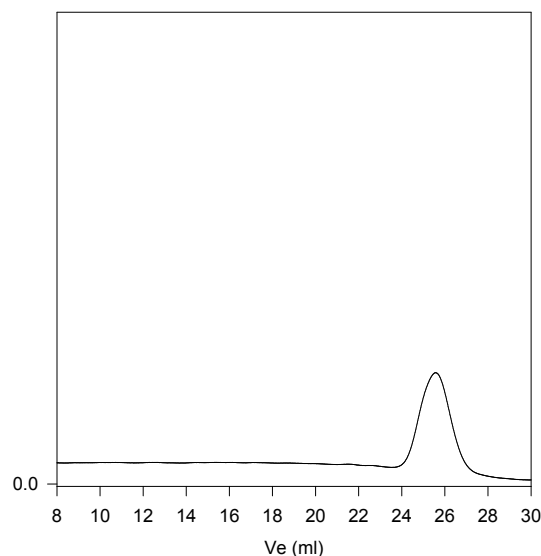
The molecular weight and polydispersity index (PDI) are obtained by size exclusion chromatography (SEC) in THF. SEC analysis was performed on a Varian liquid chromatograph equipped with refractive and UV light scattering detectors. Three SEC columns from Supelco (G6000-4000-2000 HXL) were used with triple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

Solubility:

Poly(3-chloro styrene) is soluble in DMF, THF, toluene and $CHCl_3$. It precipitates from methanol, ethanol, water and hexanes.

SEC of Homopolymer:

P3933-3C1S



Size Exclusion Chromatogram of poly 3-chloro styrene:
— $M_n=6000$, $M_w=7200$, $M_w/M_n=1.2$