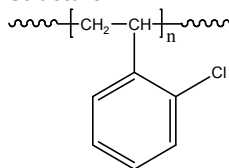


Sample Name: Poly(2-chloro styrene)

SEC of Homopolymer:

Sample #: P10334-2CIS

Structure:

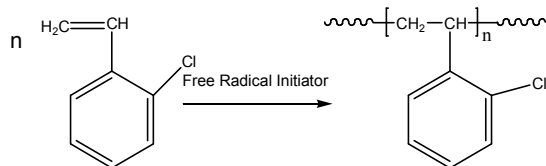


Composition:

$M_n \times 10^3$	PDI
80.0	9.0
Dn/dc in THF at 35 oC	0.1532 ml/g
With respect to Polystyrene	55,000

Synthesis Procedure:

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



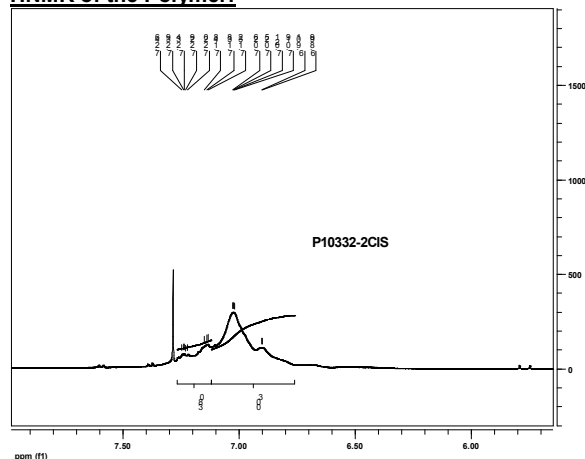
Characterization:

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.

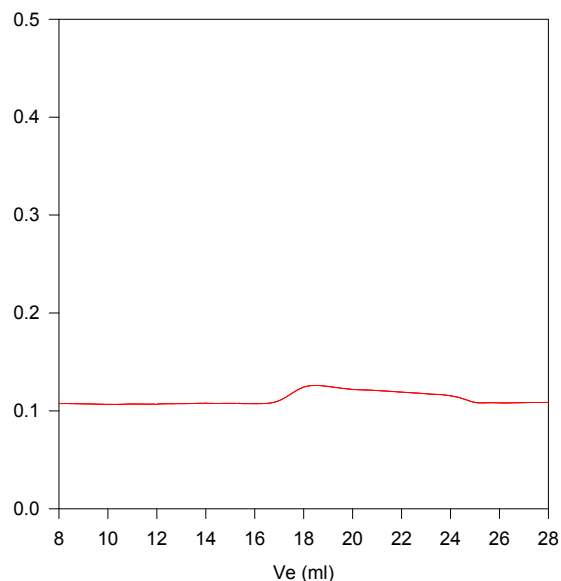
Solubility:

Poly(2-chloro styrene) is soluble in DMF, THF, toluene and CHCl_3 . It precipitates from methanol, ethanol, water and hexanes.

HNMR of the Polymer:



P10334-2CIS



Size exclusion chromatograph of poly(2-chlorostyrene):
 $M_n=80,000$, $M_w=750,000$, $PI=9.0$