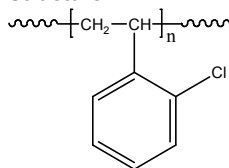


Sample Name: Poly(2-chloro styrene)

Sample #: P10338-2CIS

Structure:

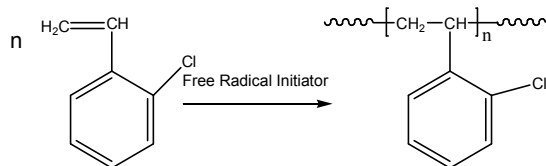


Composition:

Mn x 10 ³	PDI
75.0	1.4
Dn/dc in THF at 35 oC	0.1532 ml/g
With respect to Polystyrene	66,000

Synthesis Procedure:

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



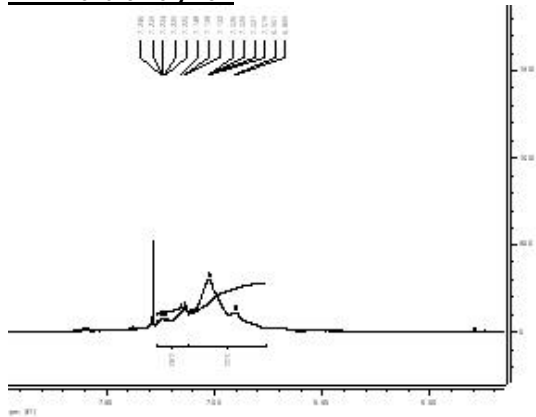
Characterization:

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:

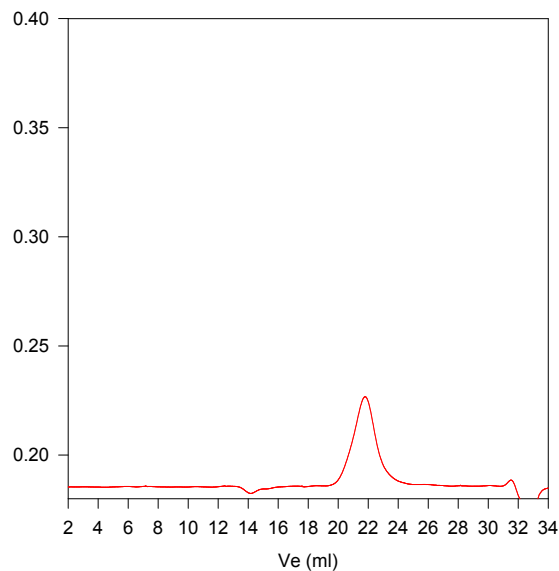
Poly(2-chloro styrene) is soluble in DMF, THF, toluene and $CHCl_3$. It precipitates from methanol, ethanol, water and hexanes.

HNMR of the Polymer:



SEC of Homopolymer:

P10338-2CIS



Size exclusion chromatograph of poly(2-chlorostyrene):

$M_n=75,000$, $M_w=105,000$, $PI=1.4$