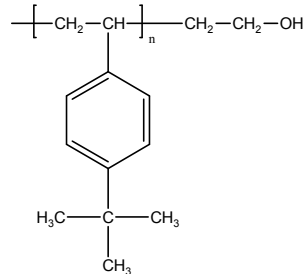


Sample Name:

Hydroxy Terminated Poly(4-t-butyl styrene)

Sample #: **P3742B-4tBuSOH**

Structure 1:



Composition:

Mn x 10 ³	PDI
1.7	1.08

Synthesis Procedure:

OH Terminated Poly(4-t-butyl styrene) was prepared by anionic living polymerization of tert.butyl styrene in THF at -78°C followed by termination with dried Ethylene oxide.

Characterization:

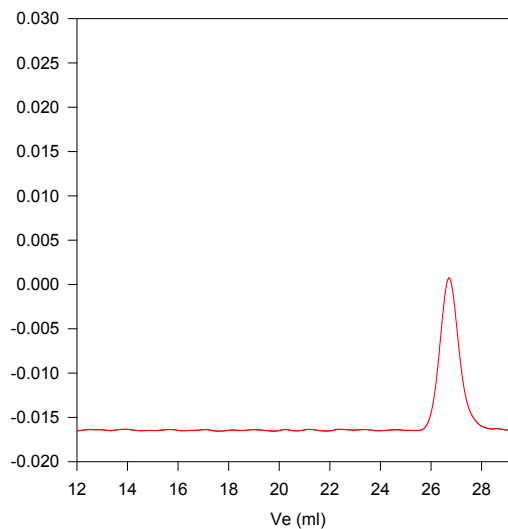
The molecular weight and polydispersity index of this polymer were determined before addition of the CO₂H function, by size exclusion chromatography (SEC) using a Varian liquid chromatograph equipped with a UV and refractive index detector. Polymer functionality was determined by titration with NaOH using phenolphthalein as the indicator.

Solubility:

Polymer is soluble in DMF, THF, toluene and CHCl₃. It precipitates from methanol, ethanol, water and hexanes.

SEC of Sample:

P3742B-2tBuSOH



Size exclusion chromatography of ω hydroxy Terminated poly(tert butylstyrene):

$M_n=1700$, $M_w=1800$, $PI=1.08$, functionality>99%