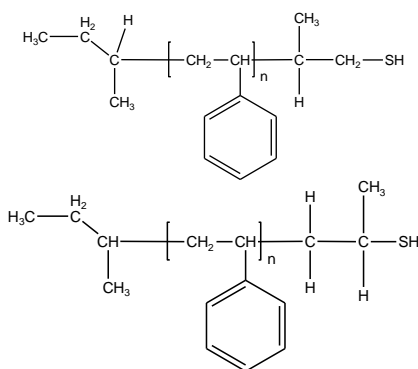


Sample Name: Poly(styrene), ω -thiol-terminated

Sample # P43337-SSH

Structure:

Route 2: (possible architectures)



Composition:

Mn x 10 ³ (g/mol)	Mw/Mn
56.0	1.05
-SH functionality	>95%
Tg	92 °C

Synthesis:

The polymer was synthesized by direct termination of anionic living polymerization of styrene by ethylene sulfide or propylene sulfide. Polymerization of styrene by sec-BuLi in THF at -78°C and termination by purified ethylene sulfide or propylene sulfide.

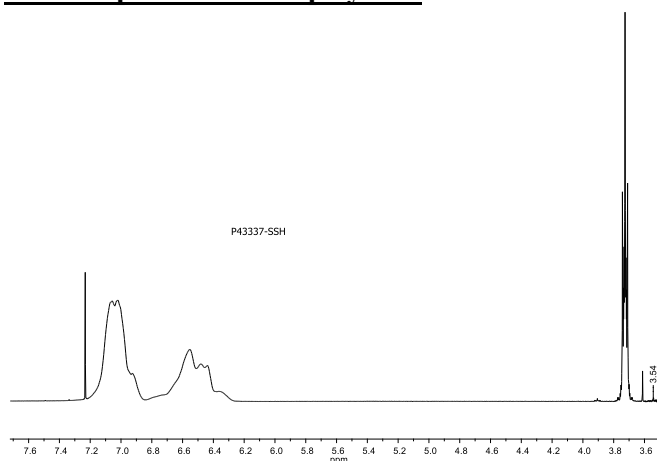
Characterization:

The molecular weight and polydispersity index of the hydroxyl terminated polymer were determined before functionalization with thiol by size exclusion chromatography (SEC) using a Varian liquid chromatograph equipped with UV-vis and refractive index detectors. Polymer functionality was verified by oxidation of thiol to disulfide.

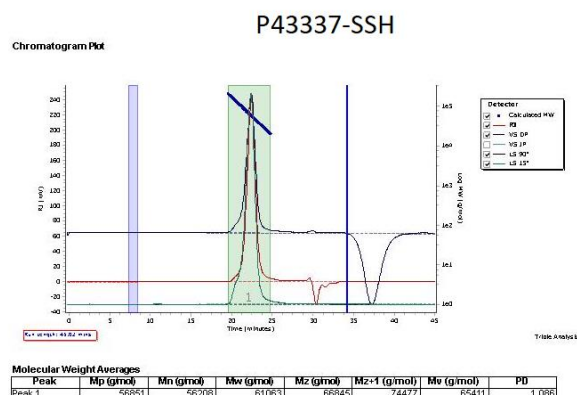
Functionality:

It was determined by oxidation reaction with iodine.

HNMR spectrum of the polymer:



SEC elugram of the Sample:



DSC thermogram of the Polymer:

