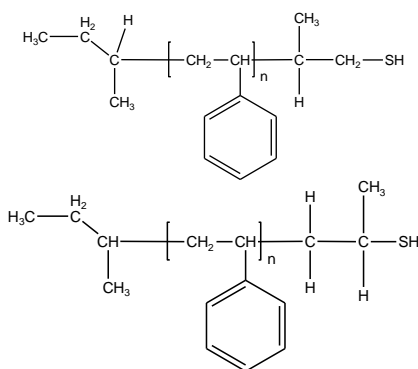


Sample Name: Thiol Terminated Polystyrene

Sample # P41358-SSH

**Structure:**

**Route 2:** (possible architectures)



**Composition:**

Mn x 10 <sup>3</sup> (g/mol)	Mw/Mn
62.5	1.02

-SH functionality	>98%
Tg	53 °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.

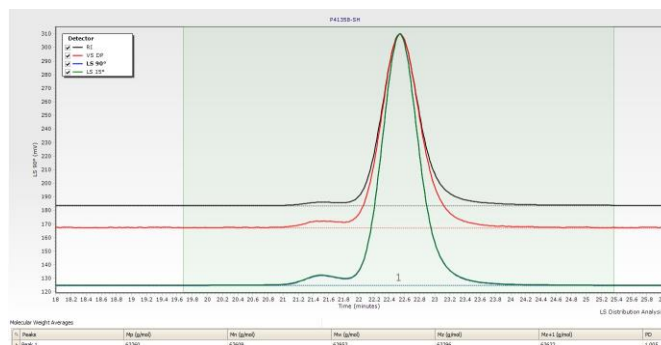
**Characterization:**

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.

**SEC elugram of the Sample:**



**DSC thermogram of the Polymer:**

