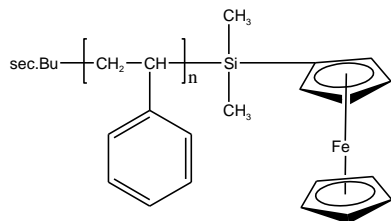


Sample Name:**Ferrocenyl Dimethyl Silane Terminated Polystyrene****Sample #: P8227- SFerro****Structure:****Composition:**

$M_n \times 10^3$	PDI
57.0	1.06
T_g (°C)	104

Synthesis Procedure:

Ferrocenyl dimethyl silane terminated polystyrene was prepared by living anionic polymerization. The living polymer was terminated by ferrocenyl chlorodimethyl silane.

Characterization:

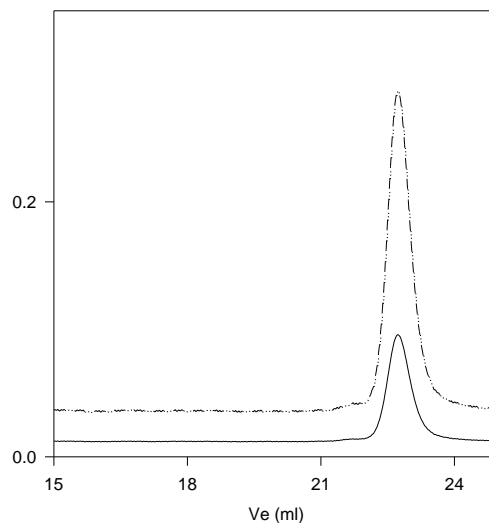
The molecular weight and polydispersity index of this polymer were determined by size exclusion chromatography (SEC) using a Varian liquid chromatograph equipped with a UV and refractive index detector. Polymer functionality was determined by titration with NaOH using phenolphthalein as the indicator.

Thermal analysis:

Thermal analysis of the samples was carried out using a differential scanning calorimeter (TA Q100) at a heating rate of 10°C/min. The inflection glass transition temperature (T_g) has been considered.

Solubility:

Polymer is soluble in toluene, THF, CHCl_3 and can be precipitated in hexane and methanol.

SEC for the sample:**P8227-Sferro**

Size Exclusion chromatography of polystyrene terminated with ferrocene

— — — Polystyrene, $M_n=57000$, $M_w=60500$ PI=1.06
 — After terminated with methylated silicon-bridged ferrocenophane PI=1.06

DSC thermogram for the sample: