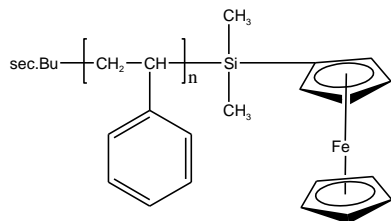


Sample Name:**Ferrocenyl Dimethyl Silane Terminated Polystyrene****Sample #: P8219- SFerro****Structure:****Composition:**

$M_n \times 10^3$	PDI
20.0	1.10
T_g (°C)	102

Synthesis Procedure:

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

Characterization:

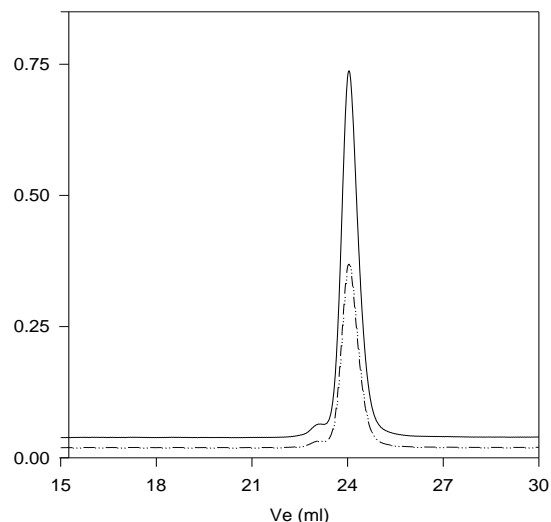
The molecular weight and polydispersity index of this polymer were determined by size exclusion chromatography (SEC) using a Varian liquid chromatograph equipped with a UV and refractive index detector. Polymer functionality was determined by titration with NaOH using phenolphthalein as the indicator.

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 of Sample:**P8219-Sferro**

Size Exclusion chromatography of polystyrene terminated with ferrocene

--- Polystyrene, $M_n=20000$, $M_w=22000$ PI=1.10

— After terminated with methylated silicon-bridged ferrocenophane PI=1.10

DSC thermogram for the sample: