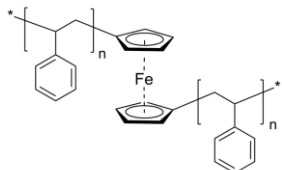


**Sample Name:** Poly(styrene), with ferrocene group in center of polymer chain

**Sample #:** P43648-SferroS

**Structure:**



**Composition:**

Mn $\times 10^3$	PDI
939.0	1.3
T <sub>g</sub> (°C): 103	

**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 and HNMR data analysis. Polymer functionality was determined by titration with NaOH using phenolphthalein as the indicator.

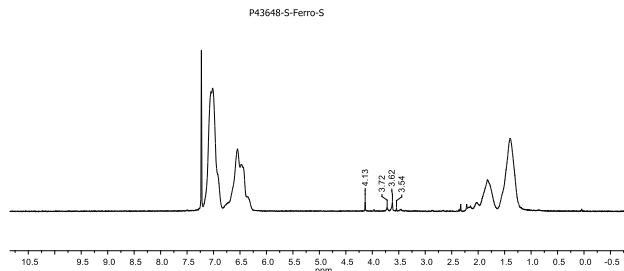
**Thermal analysis:**

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<sub>g</sub>) has been considered.

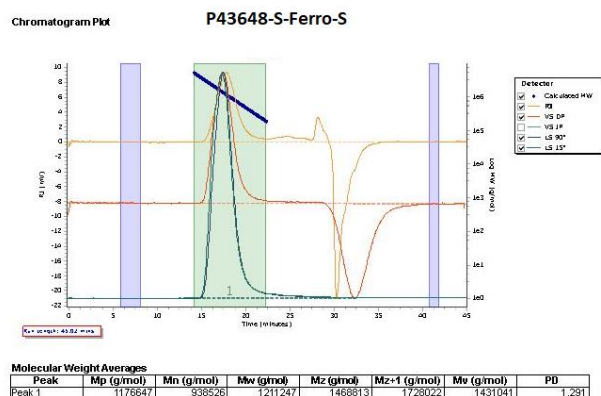
**Solubility:**

Polymer is soluble in toluene, THF, CHCl<sub>3</sub> and can be precipitated in hexane and methanol.

**HNMR spectrum of the polymer:**



**SEC profile of the sample:**



**DSC thermogram for the sample:**

