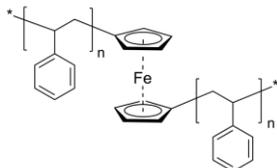


Sample Name: Poly(styrene), with ferrocene group in center of polymer chain

Sample #: P43648-SferroS

Structure:



Composition:

Mn × 10 ³	PDI
939.0	1.3
T _g (°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.

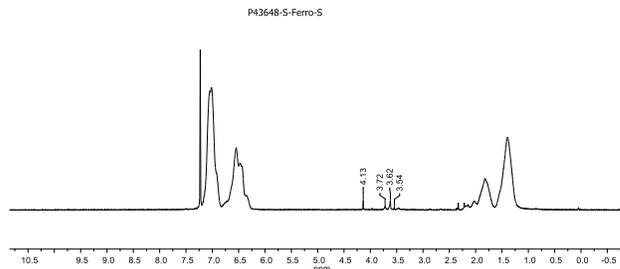
Thermal analysis:

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_g) has been considered.

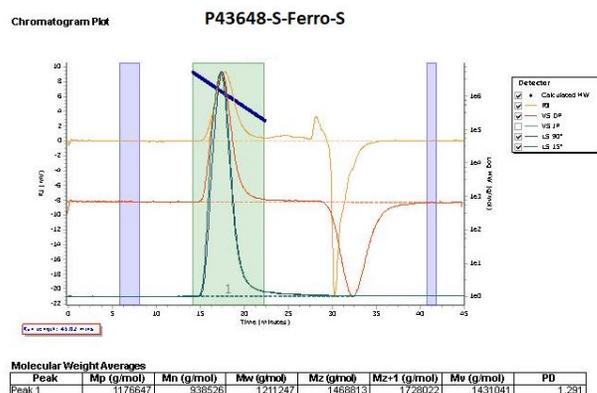
Solubility:

Polymer is soluble in toluene, THF, CHCl₃ and can be precipitated in hexane and methanol.

HNMR spectrum of the polymer:



SEC profile of the sample:



DSC thermogram for the sample:

