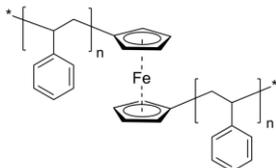


Sample Name: Poly(styrene), with ferrocene group in center of polymer chain

Sample #: P43644A-SferroS

Structure:



Composition:

$M_n \times 10^3$	PDI
117.0	1.26
T_g (°C): 103	

Synthesis Procedure:

Ferrocenyl dimethyl silane terminated polystyrene was prepared by living anionic polymerization process. 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.

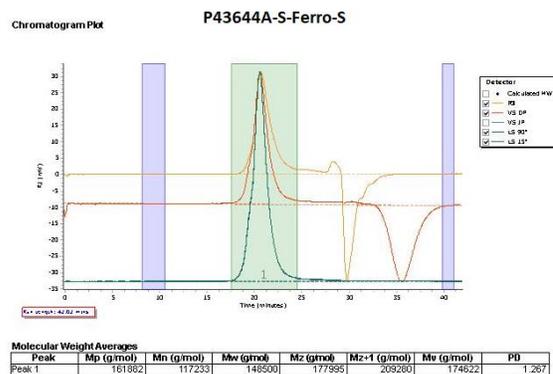
Thermal analysis:

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 profile of the sample:



DSC thermogram for the sample:

