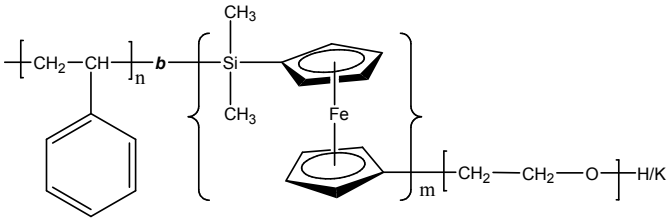
Sample Name:
Poly(styrene-b-ferrocenyldimethylsilane-b-Ethylene oxide)
Sample #: P9517B-SFESEO
Structure:



Composition:

Mn ×10³ S-b-FES-b-EO	Mw/Mn (PDI)
80.0-b-6.0-b-55.0	1.30
T_g for PS block: 104°C	T_g for FES block not detected

Synthesis Procedure:

Poly(styrene-b- ferrocenyldimethylsilane-Ethylene oxide**)** is prepared by anionic living polymerization by successive addition of styrene followed by the addition of **ferrocenyldimethylsilane monomer than EO.**
Process under publication

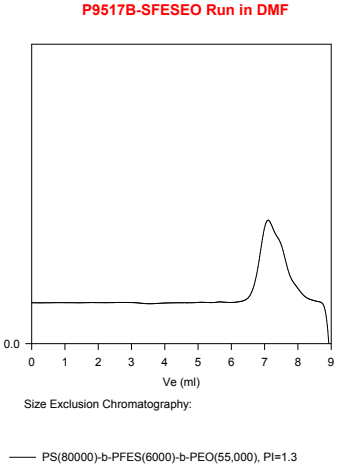
Characterization:

An aliquot of the polystyrene block was terminated before addition of hexamethyl cyclotrisiloxane and analyzed by size exclusion chromatography (SEC) to obtain the molecular weight and polydispersity index (PDI). The final block copolymer composition was calculated from ^{1}H-NMR spectroscopy by comparing the peak area of the styrene protons at 6.3-7.2 ppm with the peak area of Si(CH3) at 0.2ppm.

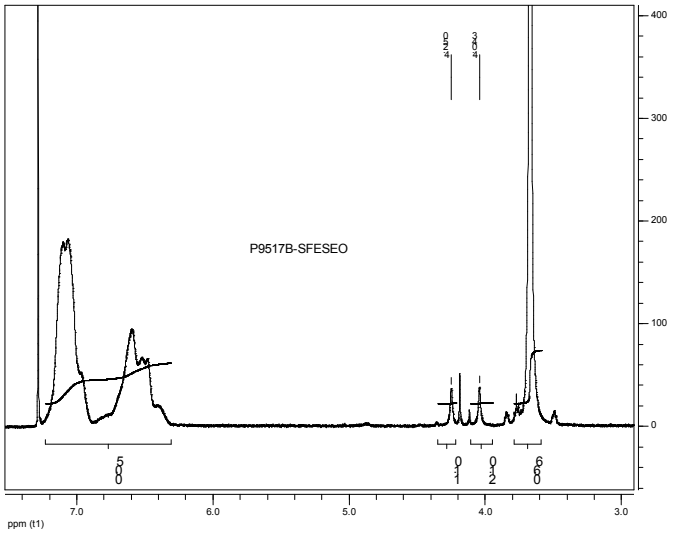
Solubility:

Polymer is soluble in THF, $CHCl_3$, toluene and precipitate out from ether and hexanes.

GPC of the final Polymer in DMF:



^{1}H NMR spectrum of the sample:



SEC profile of the block copolymer: