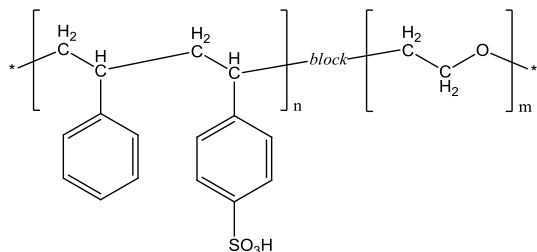


Sample Name:

Poly (styrene sulfonic acid-*b*-ethylene oxide)

Sample #: **P40903-SSAEO**

Structure:



Composition:

$M_n \times 10^3$ SSA-b-EO	M_w/M_n	Degree of sulfonation:
10.0-b-10.0	1.07	8%

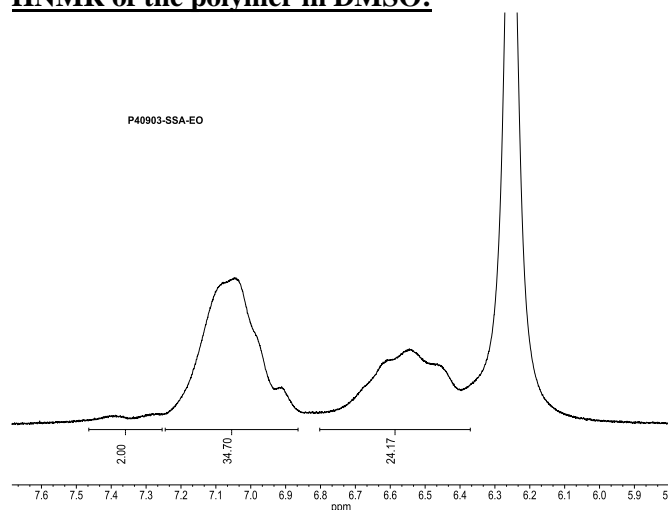
Synthesis:

The polymer was synthesized by anionic polymerization process followed by sulfonation.

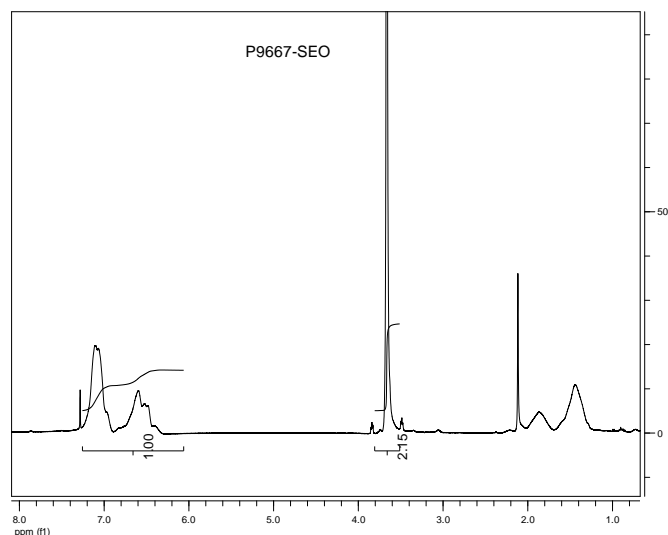
Characterization:

The product was characterized by size exclusion chromatography (SEC) and ^1H NMR.

^1H NMR of the polymer in DMSO:

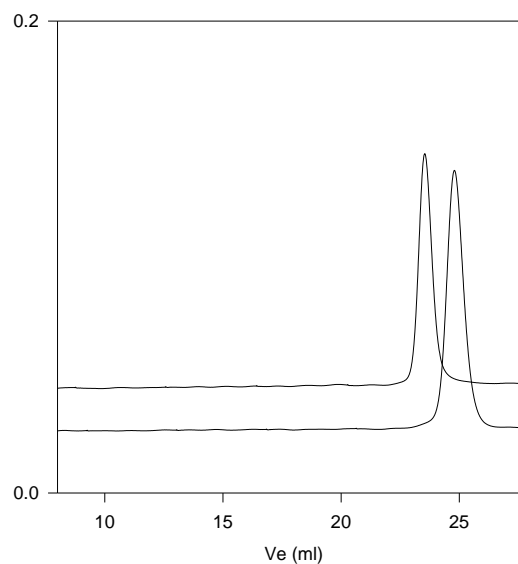


^1H NMR spectrum of the Polymer used for sulfonation:



SEC profile of the Polymer used for sulfonation:

P9667-SEO



Size Exclusion Chromatography:

— Polystyrene, $M_n=9,000$, $M_w=9,500$, $PI=1.05$

— Block Copolymer Polystyrene-*b*-Poly(ethylene oxide)

M_w : PS(9,000)-*b*-PEO(10,000), $PI=1.07$