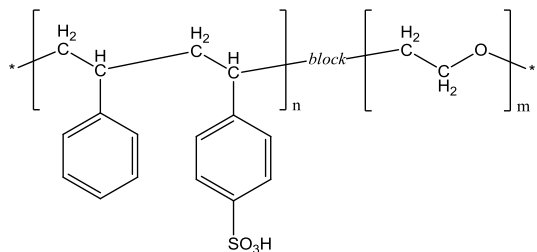


Sample Name:

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

Sample #: **P40905-SSAEO**

Structure:



Composition:

Mn x 10 ³ SSA-b-EO	M _w /M _n	Degree of sulfonation:
16.0-b-11.5	1.09	73%

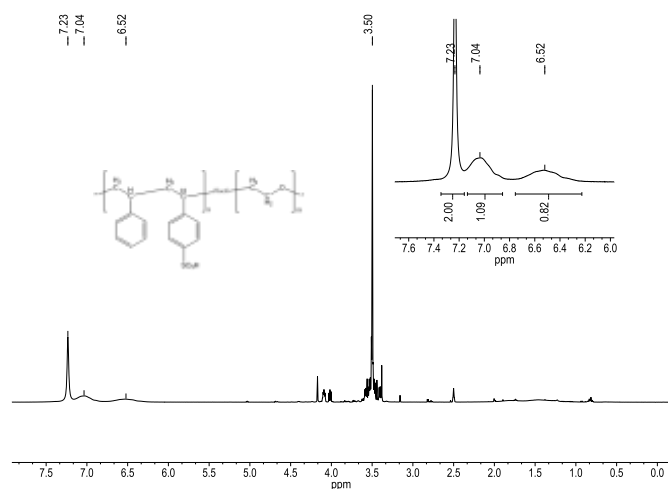
Synthesis Procedure:

Poly (styrene sulfonic acid-*b*-ethylene oxide) is obtained by living anionic polymerization process followed by sulfonation.

Characterization:

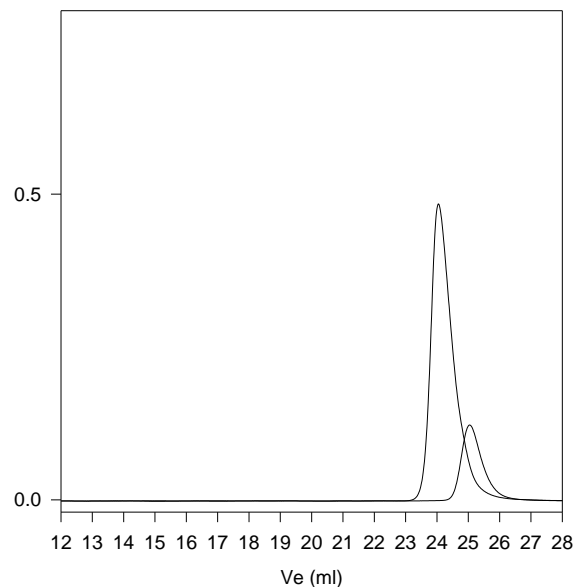
The product was characterized by size exclusion chromatography (SEC), and ¹HNMR analysis

HNMR of the polymer in DMSO:



SEC of polystyrene (first block) and poly (styrene-b-ethylene oxide) diblock copolymer:

P40905-SEO used for sulfonation



Size exclusion chromatography of poly(styrene-b-ethylene oxide)

— Poly(styrene), M_n=10000, M_w=10500, PI=1.05

— Block Copolymer PSt(10000)-b-PEO(11500), PI=1.09
Degree of sulfonation 73%: Mn 16,000-b-11,500 Mw/Mn : 1.09