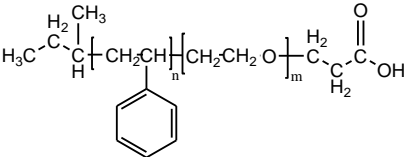


Sample Name: Carboxylic acid end functionalized Poly(styrene-b-ethylene oxide)

Sample #: P40942-SEOCOOH

Structure:



Composition:

Mn x 10 ³ S-b-EO	9.5-b-5.3
PDI	1.04
COOH functionality by HNMR/titration	> 98 %

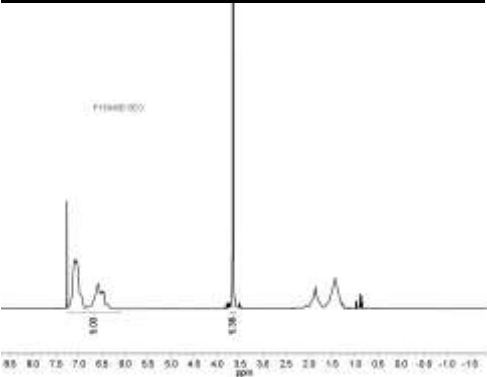
Synthesis:

COOH end functionalized Poly(styrene-b-ethylene glycol) was synthesized by living anionic polymerization of styrene and ethylene oxide monomer, followed by the conversion of hydroxyl end group into COOH

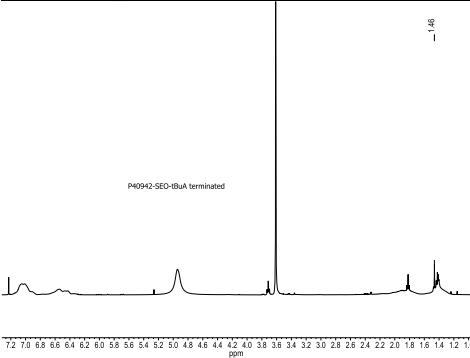
Characterization:

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

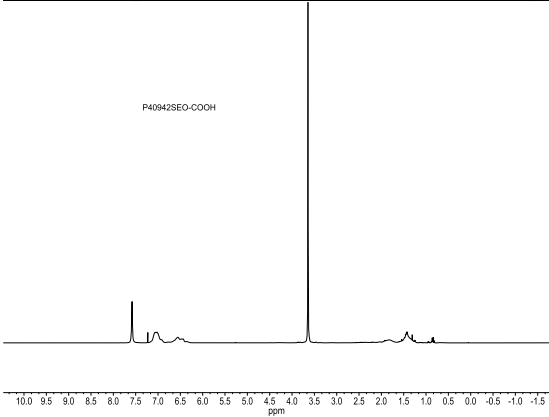
¹H NMR spectrum of the SEO sample:



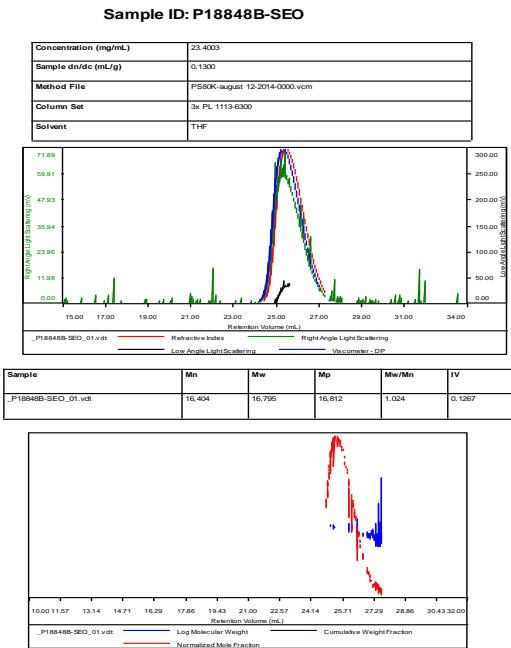
HNMR spectrum of SEO-terminated with tBuA:



¹H NMR spectrum of the SEOCOOH sample:



SEC profile of the block copolymer



FTIR of functionalized polymer: Ps-EO-tBuA terminated and after hydrolysis of tert BuA terminal unit to COOH:

