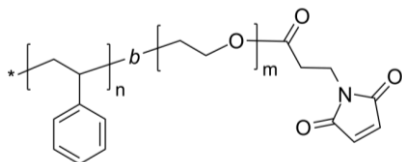


Sample Name:
Poly(styrene)-b-poly(ethylene oxide), ω -maleimido-terminated

Sample #: **P43685-SEOMaleimido**

Structure:



Composition:

Mn x 10 ³ S-b-EO	PDI
5.0-b-2.5	1.03
Maleimido functionality by HNMR > 98 %	

Synthesis Procedure:

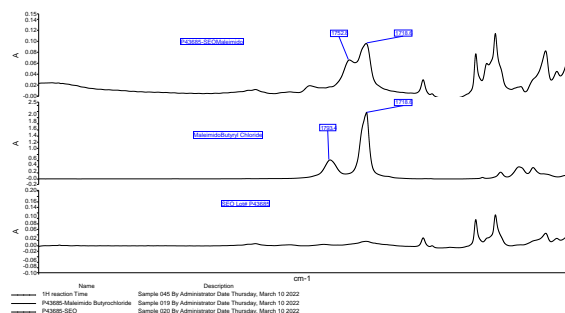
Maleimido end functionalized Poly(styrene-b-ethylene glycol) was synthesized by living anionic polymerization of styrene and ethylene oxide monomer, followed by the conversion of hydroxyl end group into 3-maleimidopropionate group by reacting diblock polymer with 3-maleimidopropionyl chloride.

Characterization:

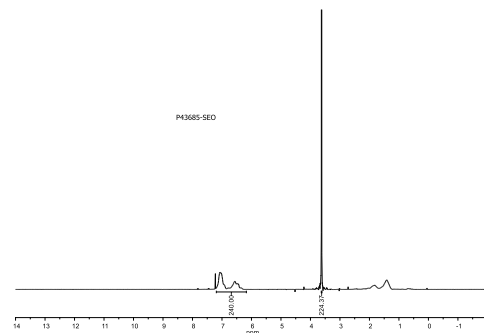
The product was characterized by size exclusion chromatography (SEC), ¹H NMR and FTIR data analysis.

FTIR spectrum of the polymer:

reaction progress followed by FTIR Shift of C=O of Acid Chloride from 1793 cm⁻¹ to 1752cm⁻¹

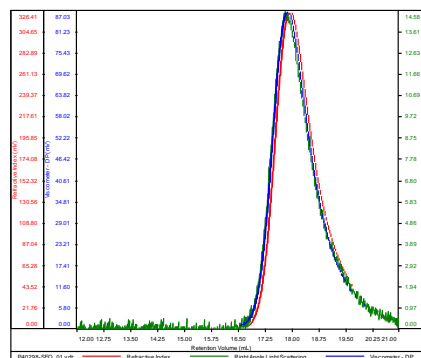


HNMR spectrum of diblock SEO: Lot# P40298:



SEC elugram of deblock SEO: Lot# P40298:

P40298-SEO	
Conc (mg/mL)	21.6216
divis (mL/g)	0.1300
Method	PS80k_December-2016-0004.vcm
Solvent	DMF w 0.023M LiBr
Column	PSS



Sample	Mn	Mw	Mp	Mw/Mn	IV
P40298-SEO_01.vch	7,391	7,564	7,298	1.024	0.0625

HNMR spectrum of functionalized polymer:

