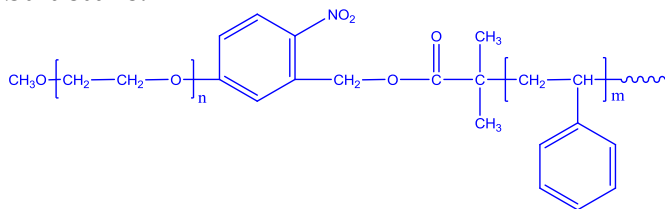


Sample Name: UV Cleavable (at 350nm)
Poly(ethylene oxide-b-styrene)

Sample #: P6841-EOSCleav
Structure:



Composition:

Mn x 10 ³ PEO-b-PS	PDI
7.0-b-47.0	1.26

Synthesis Procedure:

1. Synthesis of poly(styrene-block-ethylene oxide) copolymers by anionic polymerization and acid cleavage into its constituent homopolymers for the formation of ordered nanoporous thin films: e-polymer, 2008, 094, 1618

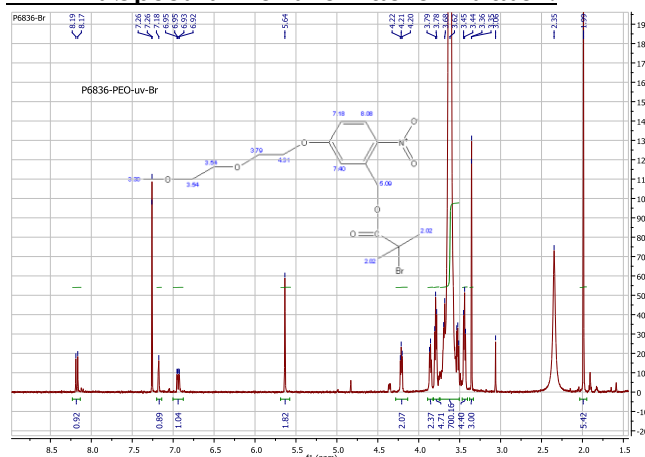
Characterization:

PEG-Br and final block copolymer were analyzed by size exclusion chromatography (SEC) to obtain the molecular weight of PEG and polydispersity index (PDI) for both PEG and block copolymer. The final block copolymer composition was calculated from ¹H-NMR spectroscopy by comparing the peak area of the ethylene oxide protons at about 3.6 ppm with the aromatic protons of styrene at about 7.0 ppm.

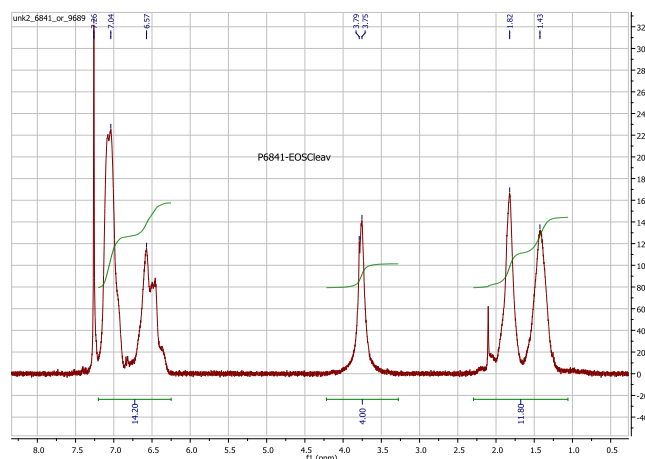
Solubility:

Poly(ethylene oxide-b-styrene) is soluble in THF, and chloroform and it precipitates out in hexane or methanol.

¹H-NMR Spectrum of the macroinitiator:



¹H-NMR Spectrum of the block copolymer:



SEC of the block copolymer:

P6841-EOS cleav

