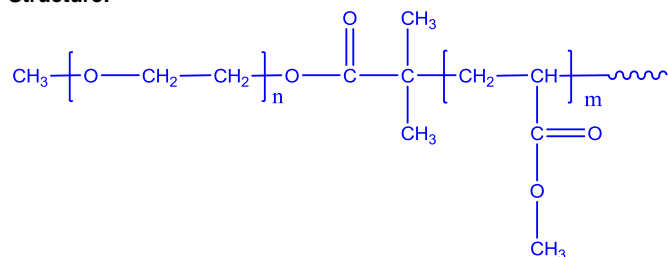


Sample Name: Poly(ethylene oxide -b- methyl acrylate)

Sample #: P6735-EOMA

Structure:

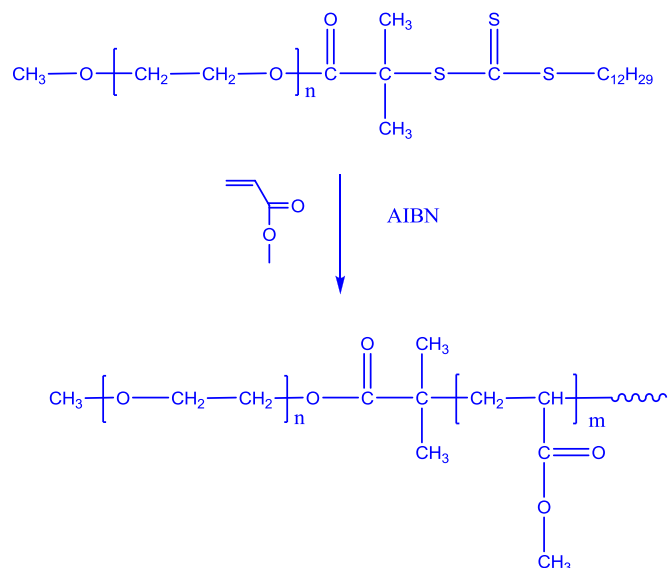


Composition:

Mn x 10 ³ PEO-b-PAMD	PDI
5.0-20.0	2.0

Synthesis Procedure:

Poly(ethylene oxide -b- methyl acrylate) is prepared by RAFT using trithiocarbonate-terminated poly(ethylene glycol) as CTA. The scheme of the reaction is illustrated below:



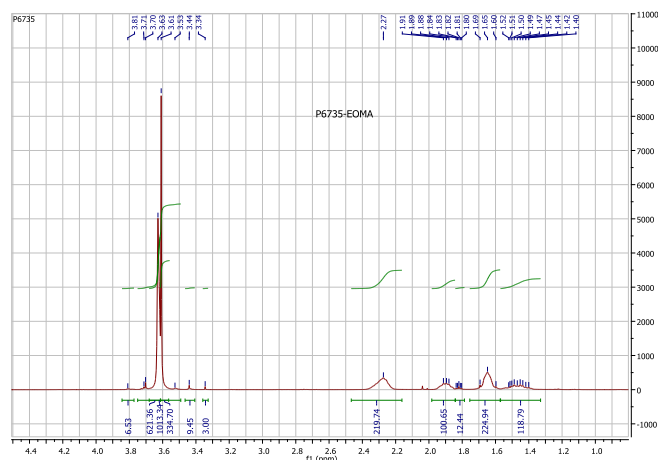
Characterization:

PEG-CTA 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 methyl acrylate protons at 1.5-2.2 ppm.

Solubility:

Poly(ethylene oxide -b- methyl acrylate) is soluble in THF, DMF, and chloroform and it precipitates out in hexane or ether.

¹H-NMR Spectrum of the block copolymer:



SEC of the block copolymer:

