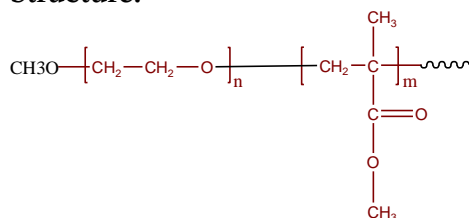


Sample Name:

Poly(ethylene oxide-b-methyl methacrylate)

Sample #: P6159-EOMMA

Structure:

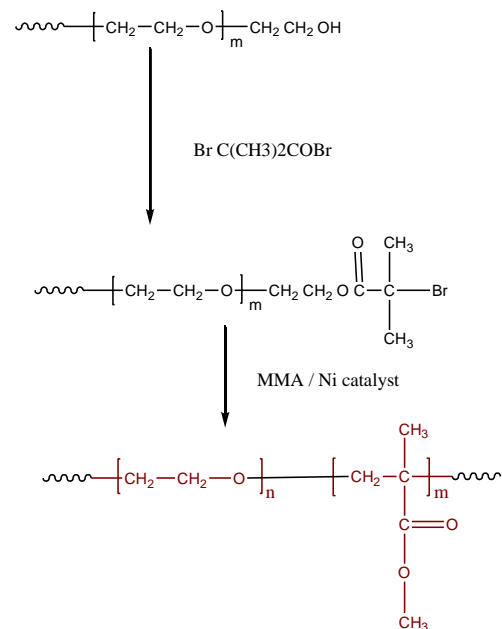


Composition:

Mn x 10 ³ PEO-b-MMA	PDI
2-b-12	1.16

Synthesis Procedure:

Poly(Ethylene oxide-methylmethacrylate)) is prepared as the scheme below:



Characterization:

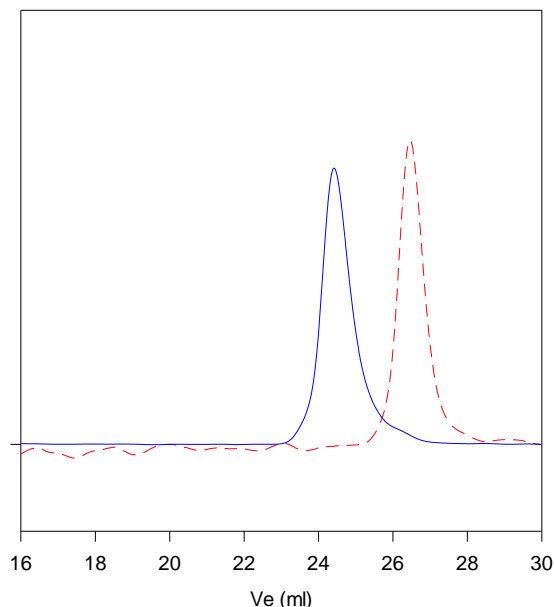
Polymer composition was determined by H NMR taking the integration of PEG block at 3.66 ppm and methyl ester of PMMA block at 3.62 ppm. Molecular weights of the first block and the Mw/Mn of the final and the first block was determined by SEC in THF.

Solubility:

Poly(ethylene oxide -b- MMA) is soluble in CHCl₃, THF, toluene. The polymer precipitated out from hexane.

SEC of the block copolymer:

P6159-EOMMA



Size exclusion chromatography of poly(EO-b-MMA)

--- PEO, M_n=2000, M_w=2160, Mw/Mn=1.08

— Poly(ethylene oxide-b-methyl methacrylate)

Mn: PEO(2000)-b-MMA(12000) Mw/Mn=1.16