

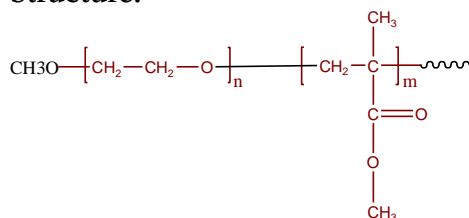
Sample Name:

Poly(ethylene oxide-b-methyl methacrylate)

SEC of the block copolymer:

Sample #: P6163-EOMMA

Structure:

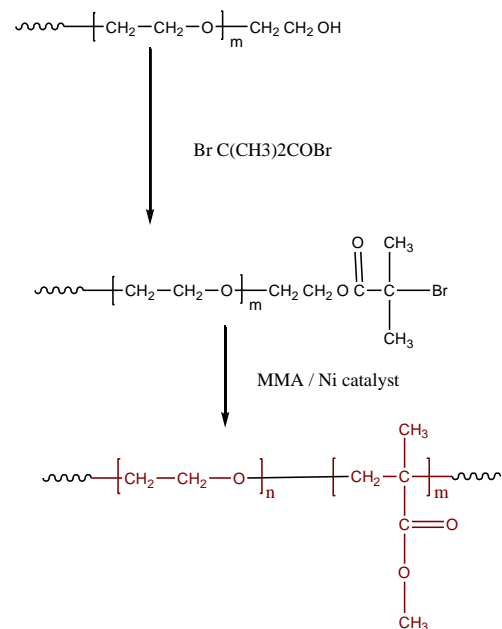


Composition:

Mn x 10 ³ PEO-b-MMA	PDI
5-b-12.3	1.17

Synthesis Procedure:

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



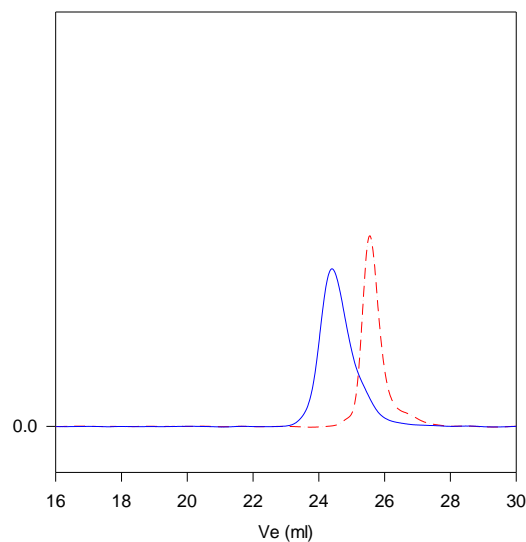
Characterization:

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.

P6163-EOMMA



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

--- PEO, M_n=5000, M_w=5400, M_w/M_n=1.08

— Poly(ethylene oxide-b-methyl methacrylate)

Mn: PEO(5000)-b-MMA(12300), M_w/M_n=1.17