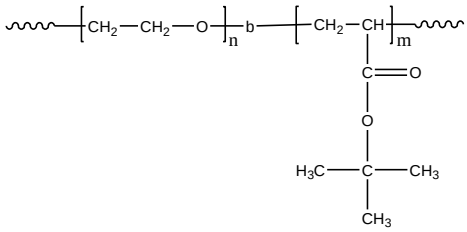
Sample Name: **Poly(ethylene oxide -b- t-butyl acrylate)**

Sample #: **P7364-EOtBuA**

Structure:

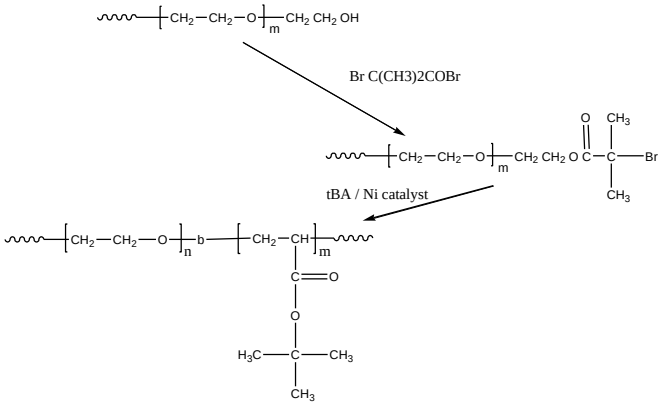


Composition:

Mn x 10^3 PEO-b-tBA (k)	PDI
5.0-9.0	1.15

Synthesis Procedure:

The polymer is prepared as following scheme:



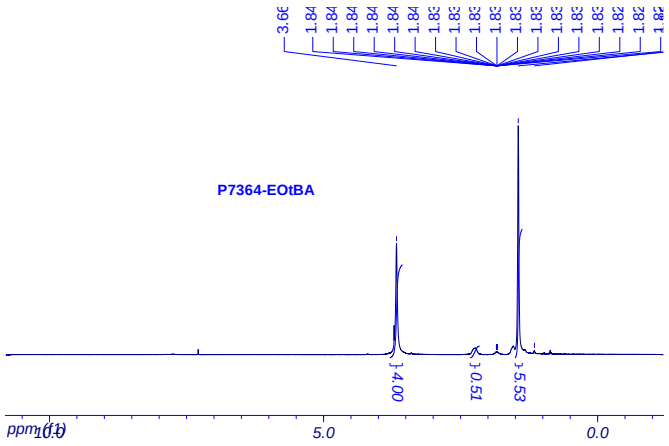
Characterization:

The final block copolymer composition was calculated from ^{1}H-NMR spectroscopy by comparing the peak area of the t-butyl acrylate protons at 1.43 ppm with the peak area of the ethylene oxide protons at 3.6 ppm. Copolymer PDI is determined by SEC.

Solubility:

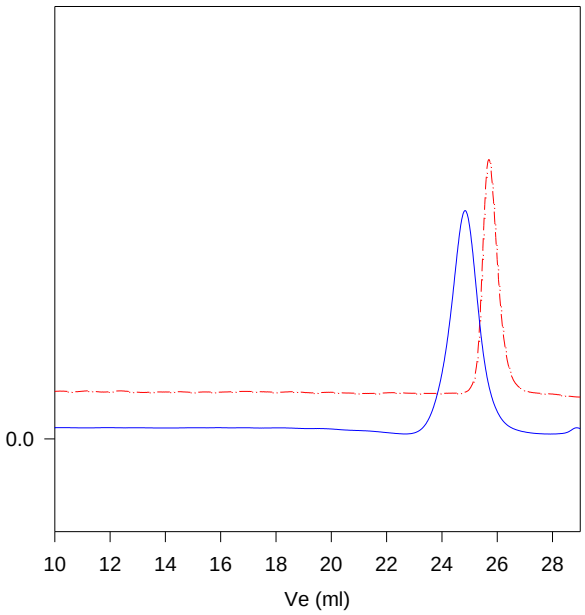
The polymer is soluble in CHCl3, methanol, THF and precipitated out from cold hexane or ether.

^{1}H-NMR Spectrum of the block copolymer:



SEC of the block copolymer:

P7364-EOtBuA



Size exclusion chromatography of poly(ethylene oxide-b-t-butyl acrylate)

PEO, M_n=5000, M_w=5200, Mw/Mn=1.05

Poly(ethylene oxide-b-t-butyl acrylate)

Mn: PEO(5000)-b-tBA(9000) Mw/Mn=1.15