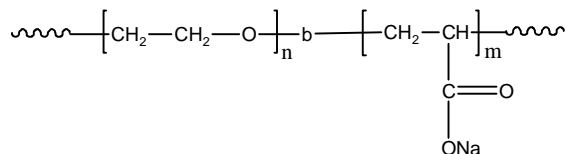
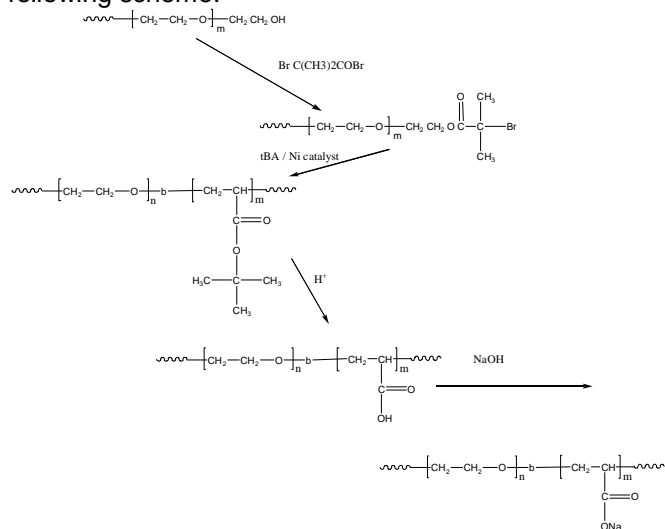


Sample Name:**Poly(Ethylene Oxide –b– Sodium Acrylate)***Dialyzed form***Sample #: P11302C-EOANa****Structure:****Composition:**

$M_n \times 10^3$ PEO-b-PANa	PDI
22.5-b-10.0	1.28

Synthesis Procedure:

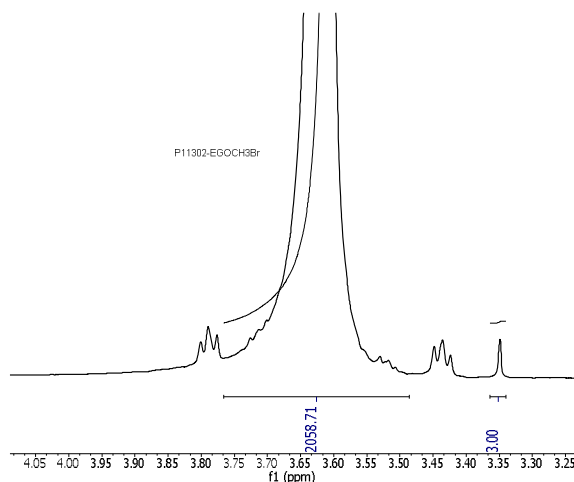
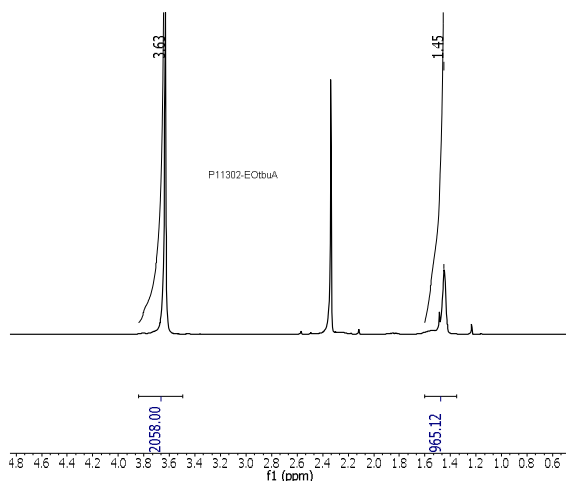
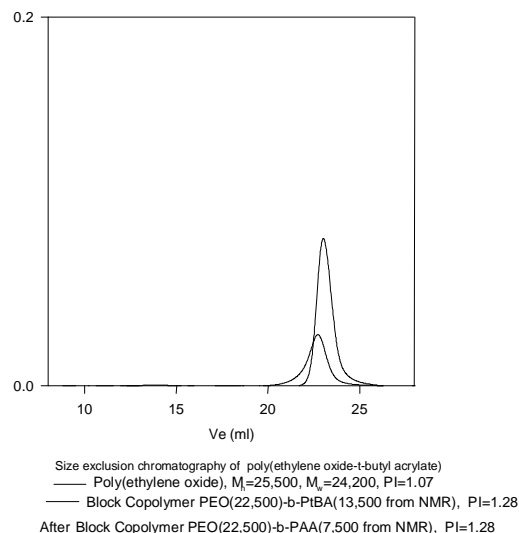
The polymer was prepared as presented on the following scheme:

**Characterization:**

The final block copolymer composition was calculated from $^1\text{H-NMR}$ spectroscopy of poly(ethylene oxide–b–t-butyl acrylate) 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, then transferred to the EOAA form accordingly. Copolymer PDI is determined by SEC of poly(ethylene oxide–b–t-butyl acrylate).

Solubility:

The polymer is soluble in water, methanol, THF; and precipitates from cold hexane and ether.

 $^1\text{H-NMR}$ spectrum of EG homopolymer (first block): **$^1\text{H-NMR}$ spectrum of EO-tBuA block copolymer:****SEC of the block copolymer before hydrolysis:****P11302A-EOtBuA precursor for EOAA****After Neutralization with NaOH:**

M_n : 22,500–b–10,000; M_w/M_n : 1.28