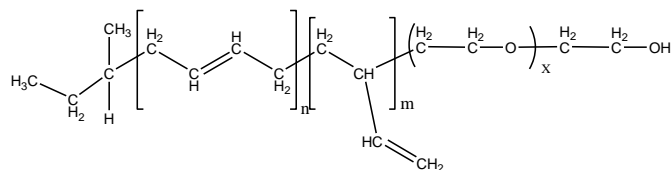


Sample Name: Poly(butadiene-b-ethylene oxide)

Sample #: **P41857B-BdEO**
(polybutadiene block rich in 1,4 microstructure)

Structure:



Composition:

Mn x 10 ³ Bd-b-EO	Mw/Mn (PDI)
0.4-b-0.7	1.07

PBd microstructure	1,4 addition >90%
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Synthesis Procedure:

The polymer was synthesized by anionic polymerization process.

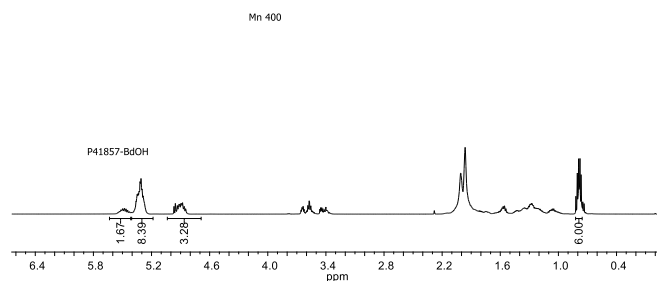
Characterization:

The polymer was characterized by ¹H NMR and SEC.

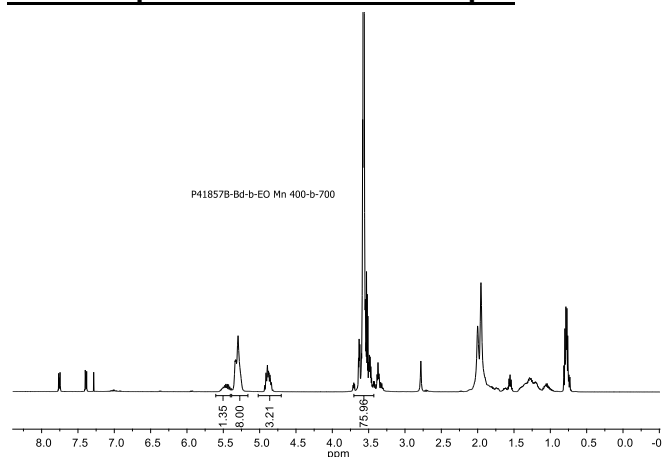
Solubility:

Poly(butadiene-b-ethylene oxide) is soluble in THF, CHCl₃, and toluene. The polymer has variable solubility in hexane, methanol, ethanol and water depending on its composition.

¹H NMR spectrum of the BdOH Sample:

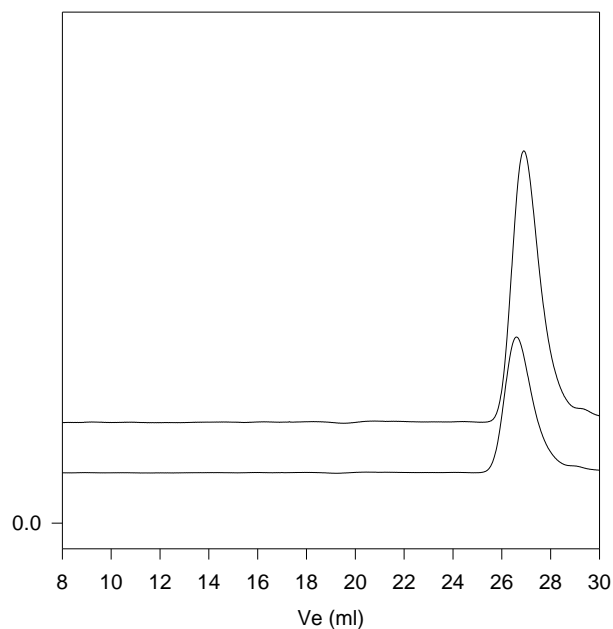


¹H NMR spectrum of the BdEO Sample:



SEC elugram of the block copolymer:

P41857B-Bd-b-EO



Size Exclusion Chromatogram of Hydroxy Terminated Polybutadiene

— Polybutadiene: M_n=400, M_w=430, M_w/M_n=1.07

Mn : Bd-b-EO 400-b-700 Mw/Mn 1.07