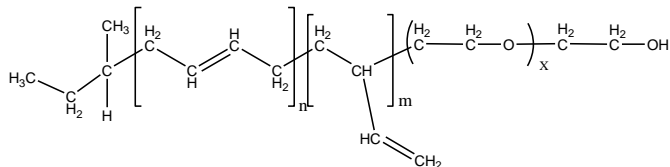


Sample Name: Poly (butadiene-b-ethylene oxide)

Sample #: P41858B-BdEO
(polybutadiene block rich in 1,4 microstructure)

Structure:



Composition:

Mn x 10 ³ Bd-b-EO	Mw/Mn (PDI)
28.5-b-54.0	1.06

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

The polymer was synthesized by anionic polymerization process.

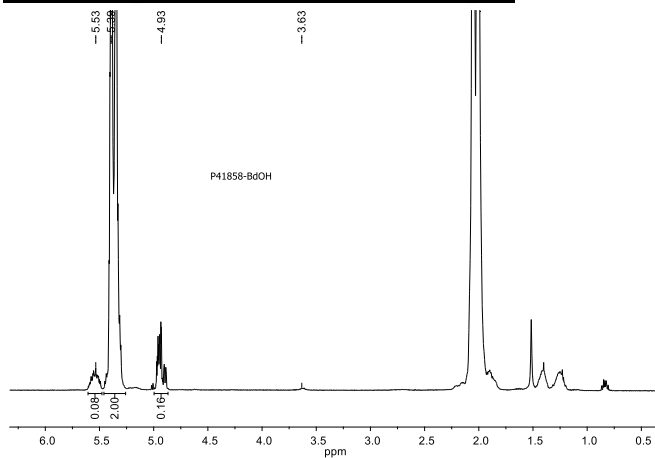
Characterization:

The polymer was characterized by ¹H NMR and SEC.

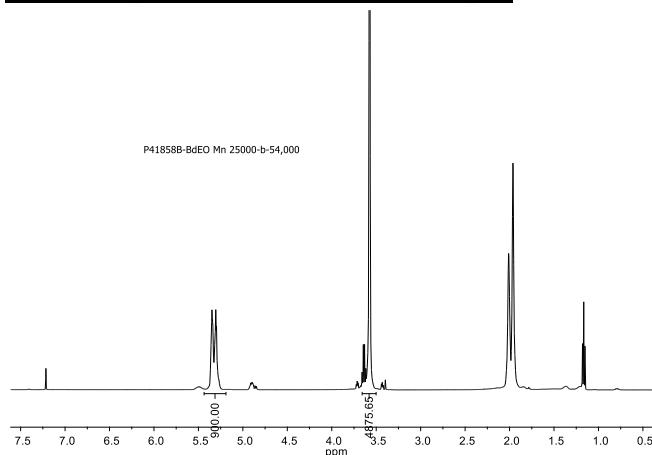
Solubility:

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:

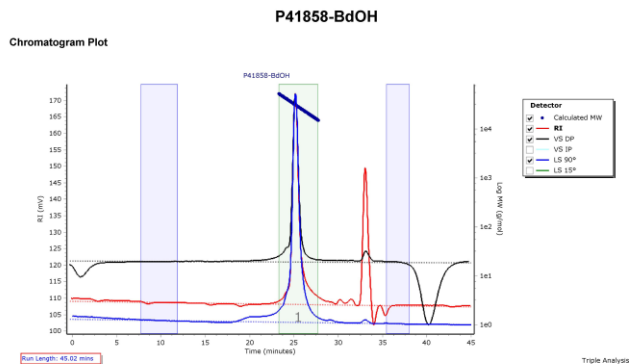


¹H NMR spectrum of the BdEO Sample:



SEC elugram of the BdOH Sample:

Agilent GPC/SEC Software

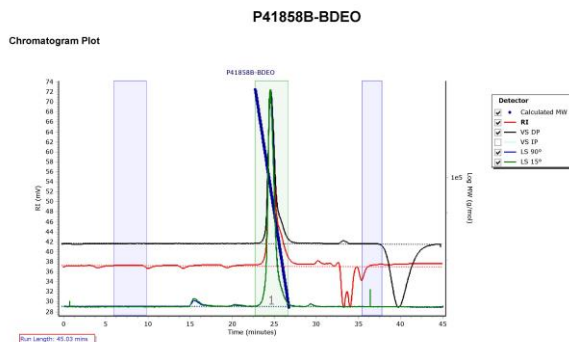


Molecular Weight Averages							PD
Peak	Mp (g/mol)	Mn (g/mol)	Mw (g/mol)	Mz (g/mol)	Mz+1 (g/mol)	Mv (g/mol)	

Peak 1	30961	28548	29634	30604	31520	30633	1.038
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SEC elugram of the block copolymer:

Agilent GPC/SEC Software



Molecular Weight Averages							PD
Peak	Mp (g/mol)	Mn (g/mol)	Mw (g/mol)	Mz (g/mol)	Mz+1 (g/mol)	Mv (g/mol)	

Peak 1	92725	79728	84437	88670	92679	86699	1.059
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