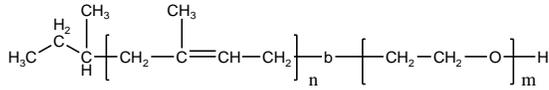


Sample Name:

**Poly(1,4-isoprene)-b-poly (ethylene oxide)**

Sample #: **P42000-IPEO**

Structure:



Composition:

$M_n \times 10^3$ PIP-b-EO	$M_w/M_n$ (PDI)
56.0-b-4.5	1.06

Synthesis Procedure:

Poly(Isoprene 1,4 addition or 1,2 addition)-b-ethylene oxide) can be prepared by anionic polymerization process.

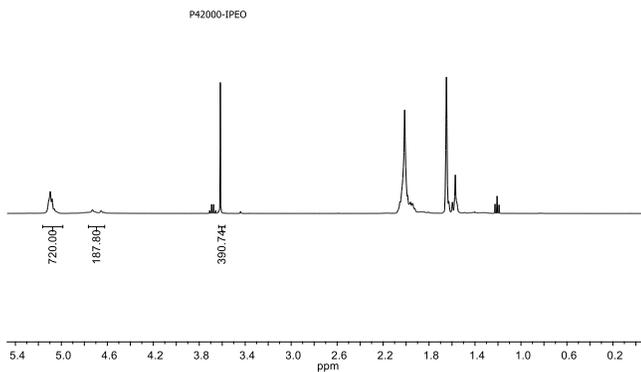
Characterization:

The product was characterized by size exclusion chromatography (SEC) and  $^1\text{H}$  NMR.

Solubility:

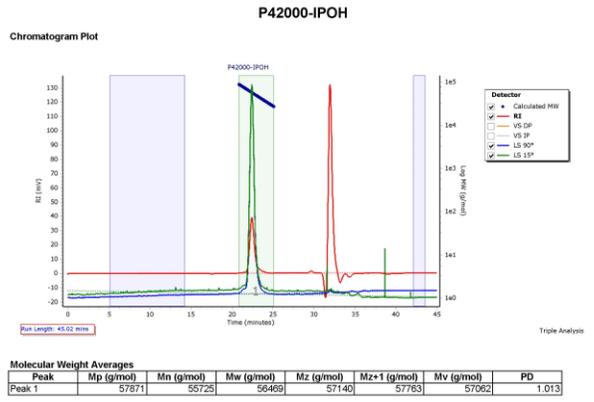
Poly(isoprene-b-ethylene oxide) is soluble in THF,  $\text{CHCl}_3$ , and toluene. The polymer has variable solubility in hexane, methanol, ethanol and water depending on its composition.

$^1\text{H}$  NMR spectrum of the sample:



SEC profile of the block copolymer:

Agilent GPC/SEC Software



Composition from HNMR