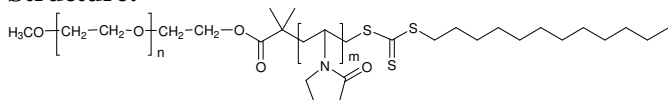


Sample Name:

Poly(ethylene glycol -b- N-vinylpyrrolidone)

Sample #: **P16086B-EGNVP**

Structure:

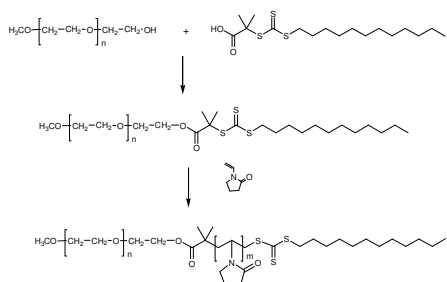


Composition:

Mn x 10 ³ PEG-b-NVP	PDI
2.0-b-5.5	1.30

Synthesis Procedure:

The diblock copolymer was prepared by RAFT process by first preparing macromolecular chain transfer agents of polyethylene glycol and following by RAFT polymerization. The reaction scheme is shown as follows:

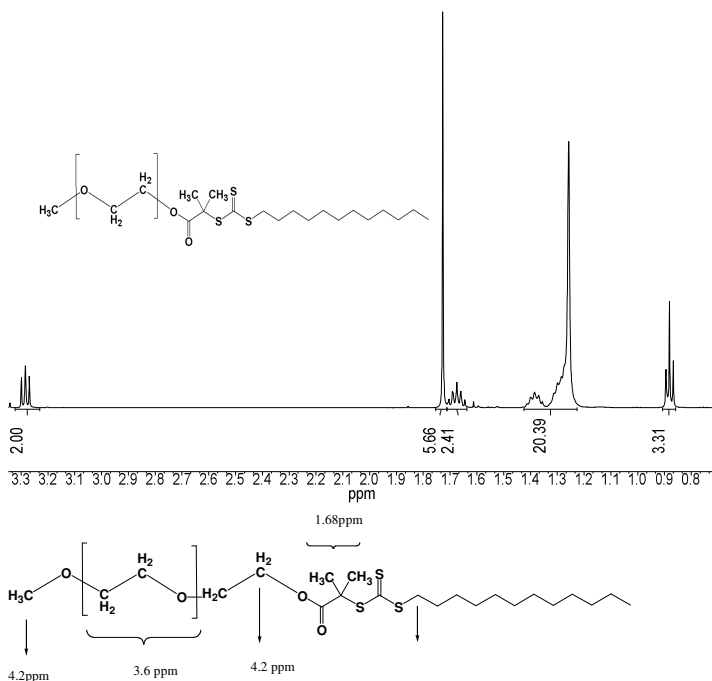


Characterization:

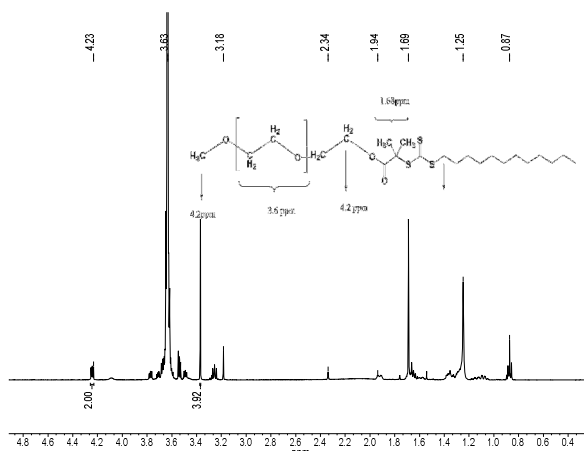
The molecular weight and polydispersity of copolymer were characterized by SEC and ¹H NMR.

Solubility: Poly(ethylene glycol -b- N-vinylpyrrolidone) is soluble in water.

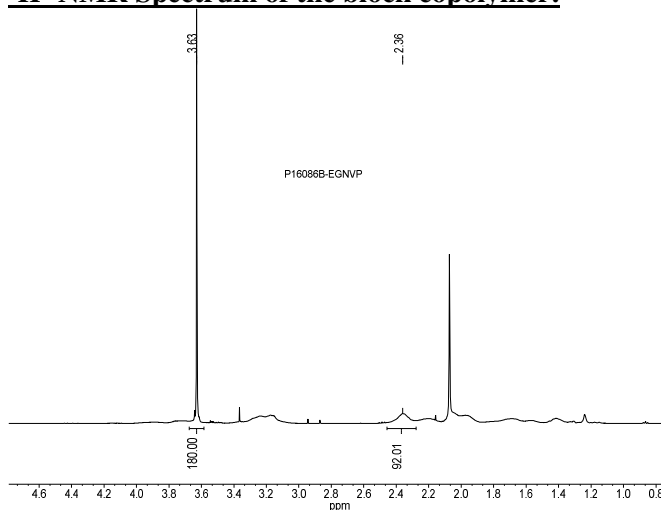
¹H NMR spectrum of the RAFT reagent:



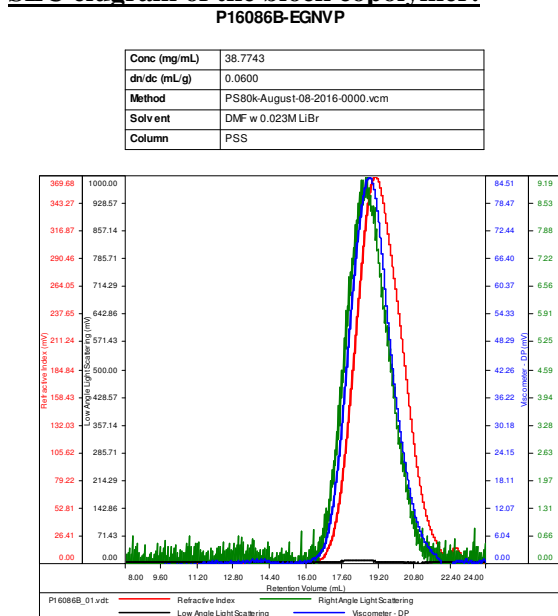
¹H NMR spectrum of the PEG-macroRAFT:



¹H -NMR Spectrum of the block copolymer:



SEC elugram of the block copolymer:



Sample	Mn	Mw	Mp	Mw/Mn	IV
P16086B_01.vdt	7,469	9,889	9,650	1.324	0.0531