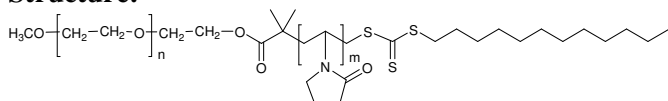


**Sample Name:**  
**Poly(ethylene glycol -b- N-vinylpyrrolidone)**

**Sample #: P16086A-EGNVP**

**Structure:**

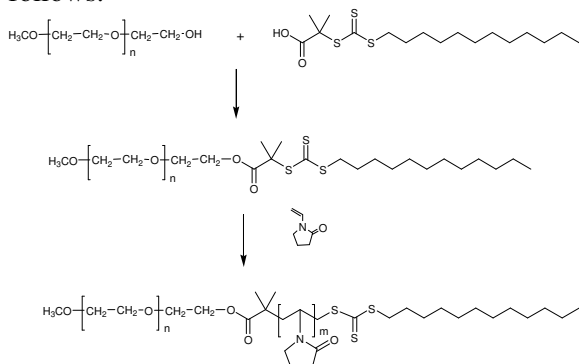


**Composition:**

Mn x 10 <sup>3</sup> PEG-b-NVP	PDI
2,000-b-22.0	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:

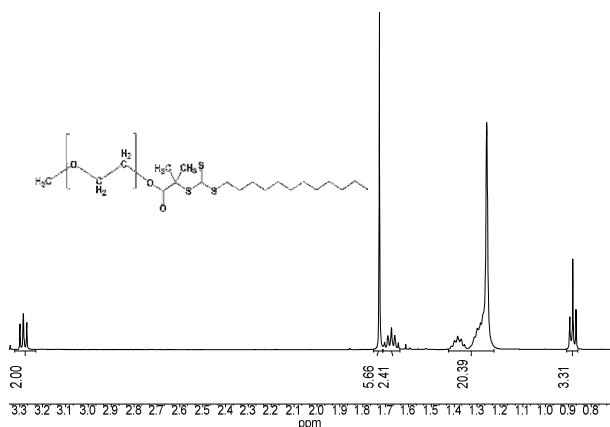


**Characterization:**

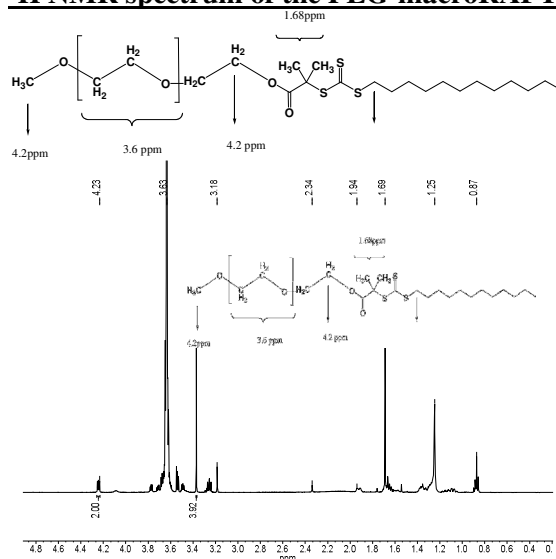
The molecular weight and polydispersity of copolymer were characterized by SEC and <sup>1</sup>H NMR.

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

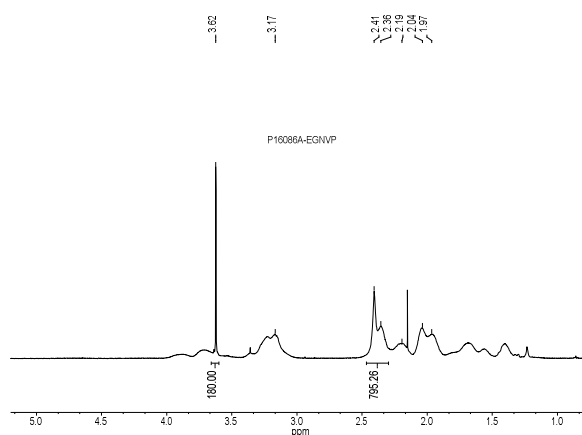
**<sup>1</sup>H NMR spectrum of the RAFT reagent:**



**<sup>1</sup>H NMR spectrum of the PEG-macroRAFT:**



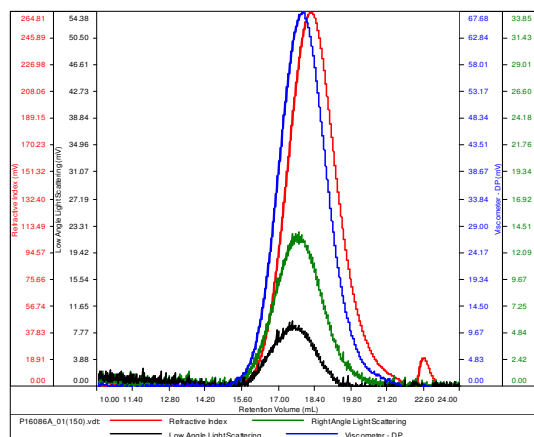
**<sup>1</sup>H NMR Spectrum of the block copolymer:**



**SEC elugram of the block copolymer:**

P16086A-EGNVP

Conc (mg/mL)	27.8202
dn/dc (mL/g)	0.0560
Method	PS80k-August-08-2016-0000.vcm
Solvent	DMF w 0.023MLIBr
Column	PSS



Sample	Mn	Mw	Mp	Mw/Mn	IV
P16086A_01(150).vdt	18,092	23,663	21,081	1.308	0.0592