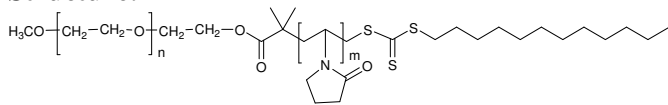


Sample Name:

**Poly(ethylene glycol -b- N-vinylpyrrolidone)**

Sample #: **P16086-EGNVP**

**Structure:**

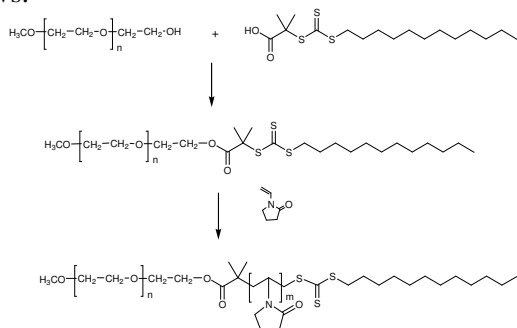


**Composition:**

Mn x 10 <sup>3</sup> PEG-b-NVP	PDI
2.0-b-28.0	1.4

**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:

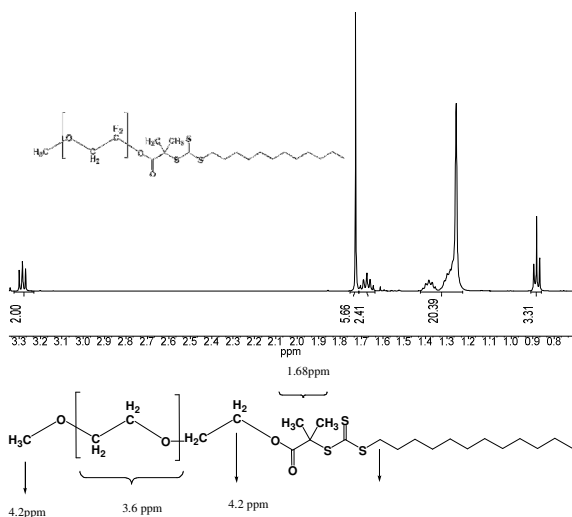


**Characterization:**

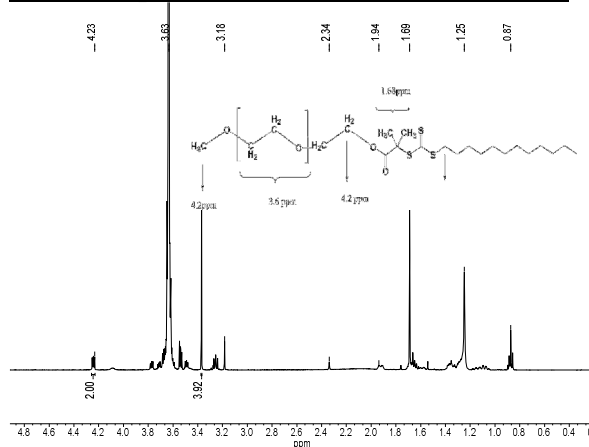
The molecular weight and polydispersity of copolymer were characterized by SEC and <sup>1</sup>H NMR.

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

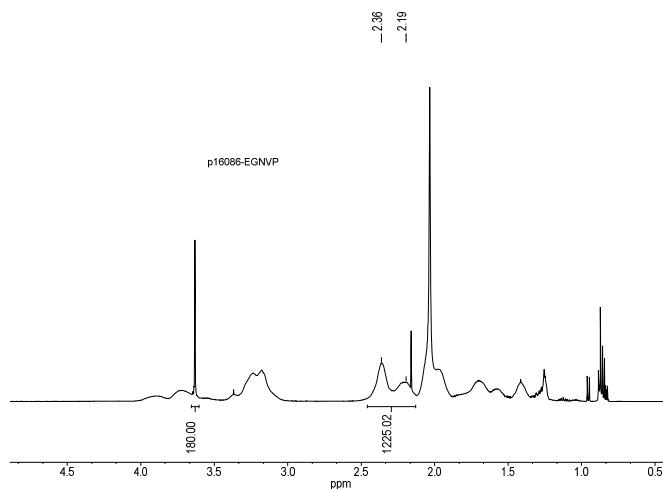
**<sup>1</sup>H NMR spectrum of the RAFT reagent:**



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



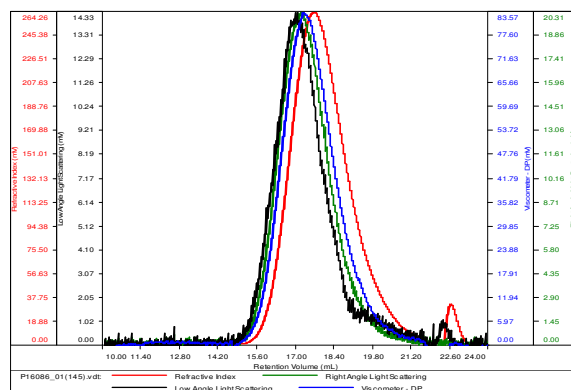
**<sup>1</sup>H -NMR Spectrum of the block copolymer:**



**SEC elugram of the block copolymer:**

**P16086-EGNVP**

Conc (mg/mL)	37.3019
dn/dc (mL/g)	0.0450
Method	PS80k:August-08-2016-0000.vcm
Solvent	DMF w 0.023M LiBr
Column	PSS



Sample	Mn	Mw	Mp	Mw/Mn	IV
P16086_01(145).vdt	30,544	43,272	38,606	1.412	0.0557