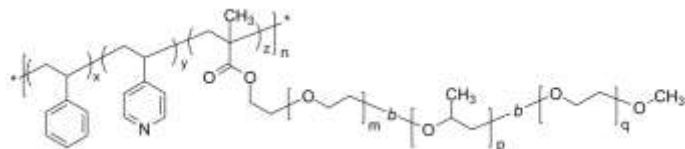Sample Name: **Random copolymer of Poly (styrene–co–4-vinyl pyridine–co–[poly (ethylene oxide–b–propylene oxide–b–ethylene oxide)] methacrylate)**

Sample #: **P40954-S4VPEOPOEOran**

Structure:

Composition:

Mn $\times 10^3$	PDI
58.0	2.22

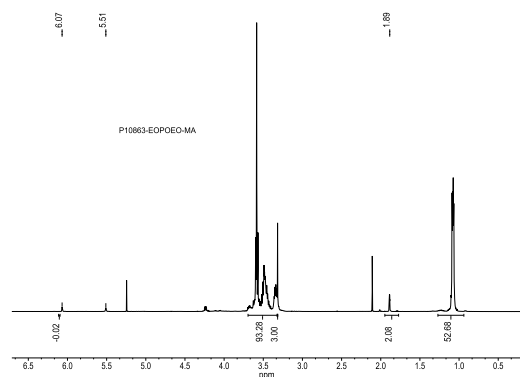|	
S: 4VP: ratio	12:78
4VP:EOPOEO ratio	76:24
S:4VP:EOPOEO ratio After normalization	10:68:22
Macromonomer Lot # P10863 EOPOEO-MA 0.30-b-1.0-b-0.30	Dp: 7-b-18-b-7

Characterization:

The polymer analyzed by size exclusion chromatography (SEC) to obtain the molecular weight and polydispersity index (PDI). The final block copolymer composition was calculated from ^{1}H-NMR spectroscopy.

Solubility:

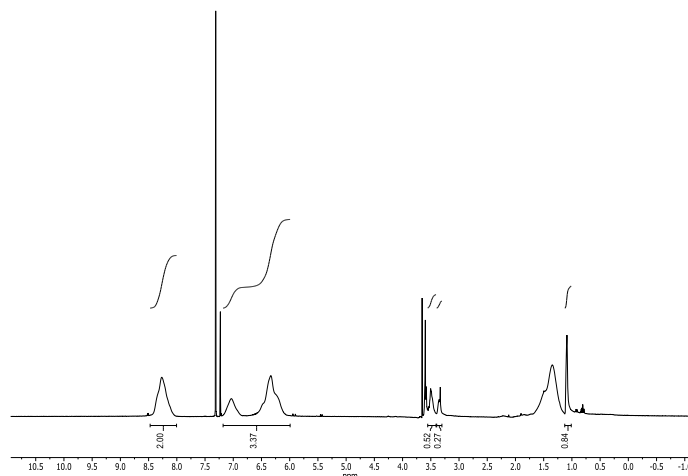The polymer is soluble in acetone, DMF, methanol. It precipitates from, ether and hexane.

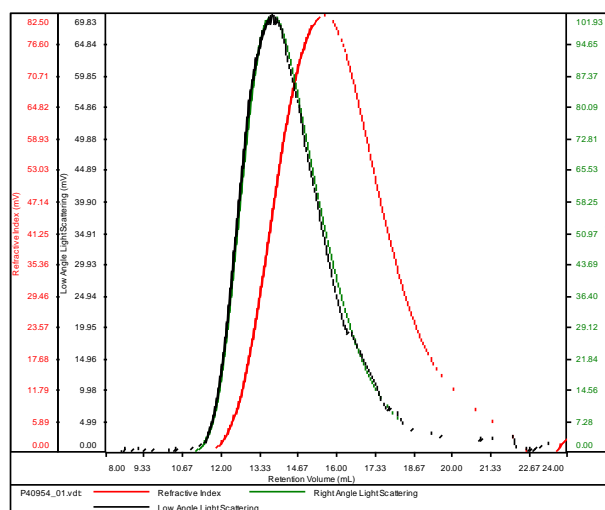**HNMR of EOPOEO Macromonomer: EOPOEO First Block Mpeg**

^{1}H NMR spectrum of the random copolymer:

SEC elugram of the Sample:

P40954

Conc	9.3571
dn/dc	0.1530
Solvent	DMF w 0.023M LiBr
Flow Rate	0.7000
Method	PS80k_2018-02-09-0000.vcm

Sample	Mn	Mw	Mp	Mw/Mn	IV
P40954_01.vdt	57,800	128,560	86,538	2.224	0.4452