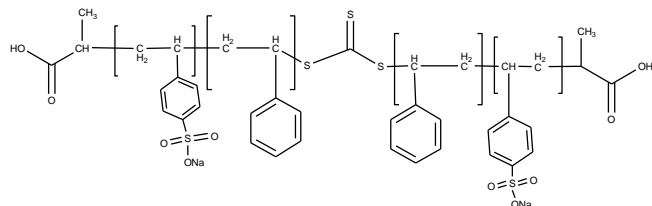


**Sample Name:** Poly (4-styrene sulfonic acid Sodium salt-*b*-styrene-*b*-4-styrene sulfonic acid sodium salt) triblock copolymer with RAFT moiety in center

**Sample #:** P16416A-SSO3Na-S-SSO3Na

**Structure:**



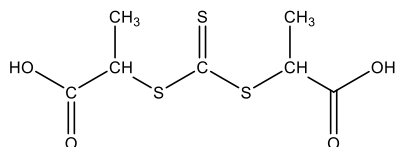
**Composition:**

Mn x 10 <sup>3</sup> SSO3Na-b-S-b-SSO3Na	PDI
4.0-b-9.5-b-4.0	1.28

**Synthesis Procedure:**

The polymer was synthesized by RAFT process using following bifunctional initiator:

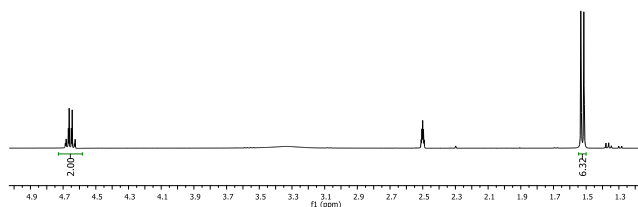
**Structure:**



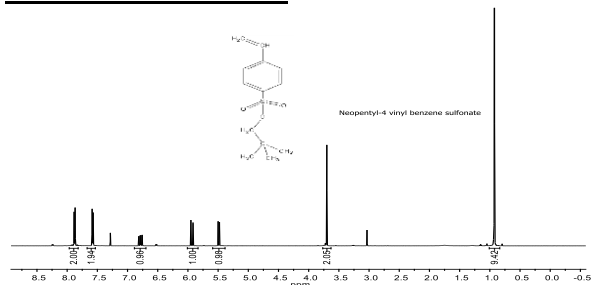
**Characterization:**

The chemical structure of the product was confirmed by FT-IR and <sup>1</sup>H NMR and GPC in DMF.

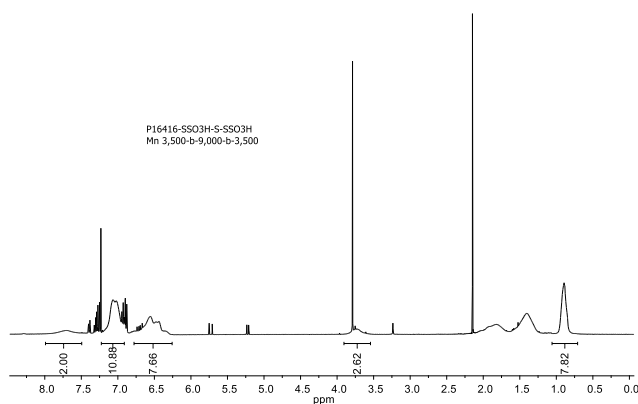
**<sup>1</sup>H NMR (400 MHz, DMSO-d<sub>6</sub>) of RAFT:**



**<sup>1</sup>H NMR of Monomer:**



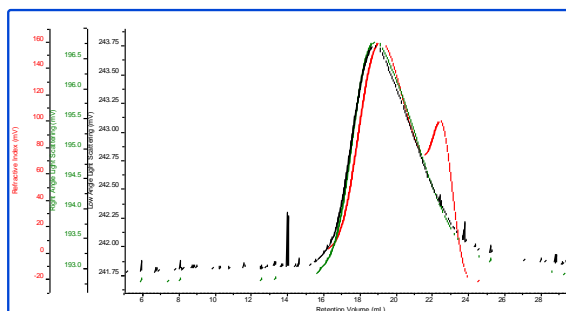
**<sup>1</sup>H NMR of Triblock copolymer:**



**SEC chromatogram:**

**P16416-SSO3N Pester**

dn/dc	0.1650
Flow Rate	0.7000
Solvent	DMF with LiBr
Method	PSS column-PMMA60K-Jan3-2019-0003.vcm



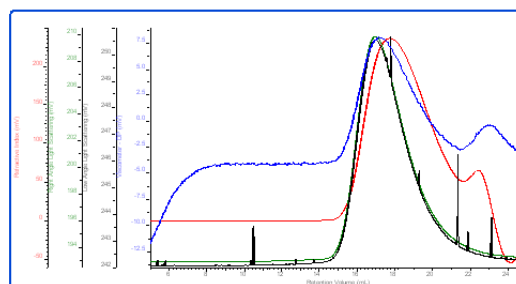
Sample	Mn	Mw	Mp	Mw/Mn
P16416-1_1_2019-07	9,818	10,277	8,752	1.047

After Thermolysis of Neopentyl group Mn:8000

**SEC chromatogram of the Sample:**

**P16416**

dn/dc	0.1650
Flow Rate	0.7000
Solvent	DMF with LiBr
Method	PSS column-PMMA60K-Jan3-2019-0003.vcm



Sample	Mn	Mw	Mp	Mw/Mn
P16416-2_1_2019-07	16,665	21,415	21,645	1.285