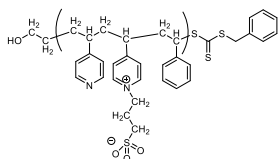


**Sample Name:** Poly (styrene-co-4-vinylpyridine-co-1-(3-Sulfopropyl)-4-vinylpyridinium), random

**Sample #:** P44103B-S4VP4VPSPran

**Structure:**

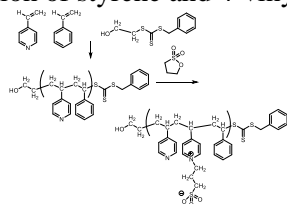


**Composition:**

Mn x 10 <sup>3</sup> PS-co-P4VP	PDI
13.5	1.09
P4VP (mol%): 20	
S: 4VP:4VPSP 8:6:14	
CAS Number: 26222-40-2 for S4VPPran	

**Synthesis Procedure:**

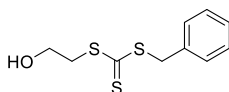
The polymer is prepared by RAFT polymerization of styrene and 4-vinylpyridine.



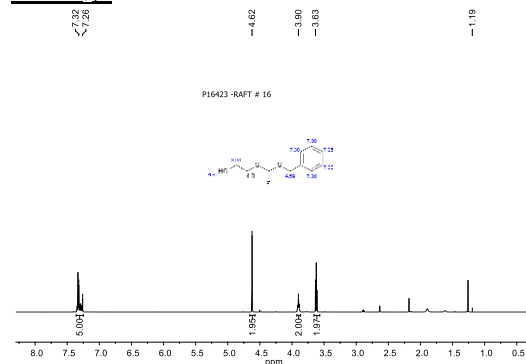
Following RAFT reagent was used.

**Benzyl-2-hydroxyethyltrithiocarbonat**

**Structure:**



**<sup>1</sup>H-NMR spectrum of RAFT (400 MHz, CDCl<sub>3</sub>):**



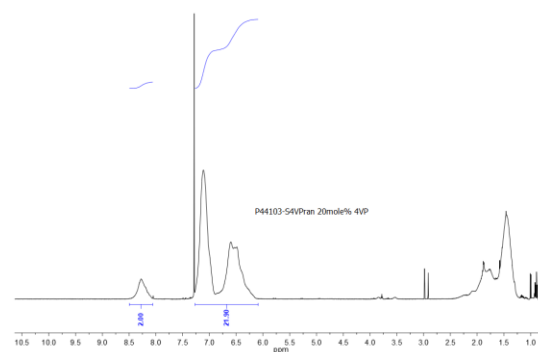
**Characterization:**

The product was characterized by size exclusion chromatography (SEC) and <sup>1</sup>H NMR data analysis.

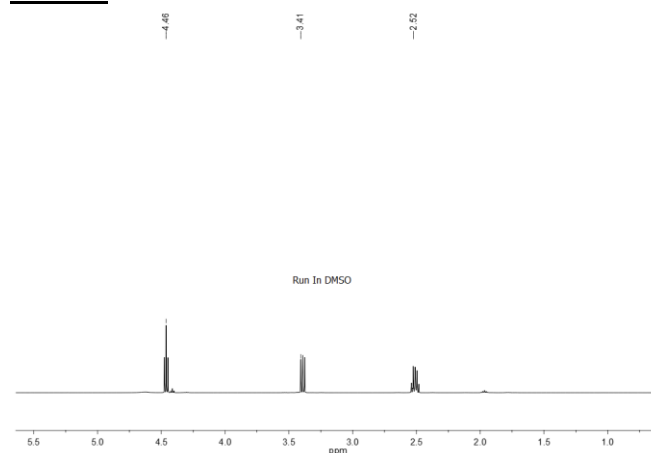
**Solubility:**

CHCl <sub>3</sub>	Soluble
Acetone	Hazy solution
DMF	Soluble
THF	Soluble
Methanol	Insoluble
Water	Insoluble

**<sup>1</sup>H-NMR Spectrum of the S4VP random copolymer:**



**HNMR spectrum of Propane sultone in DMSO:**



### **<sup>1</sup>H-NMR Spectrum of the S4VP with propane sultone random copolymer run in d6Acetone:**

