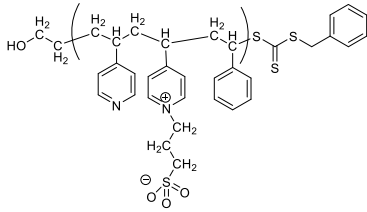


**Sample Name:** Poly (styrene-co-4-vinylpyridine-co-1-(3-Sulfopropyl)-4-vinylpyridinium), random

**Sample #:** P44127B-S4VP4VPSPran

**Structure:**



**Composition:**

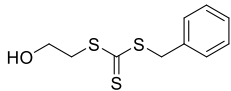
<b>Mn x 10<sup>3</sup></b>	<b>PDI</b>
<b>PS-co-P4VP-4VPSP</b>	
26.0	1.4
P4VP (mol%): 90	
S: 4VP:4PSP 1:8.0:1	
CAS Number: 26222-40-2 for S4VPran	

**Synthesis Procedure:**

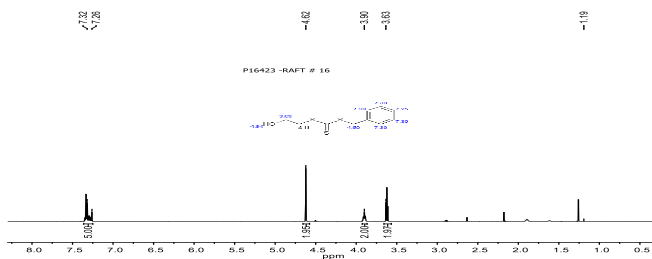
The polymer is prepared by RAFT polymerization of styrene and 4-vinylpyridine. Following RAFT reagent was used.

**Benzyl-2-hydroxyethyltrithiocarbonat**

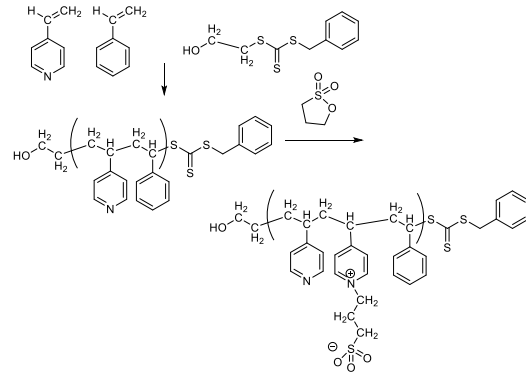
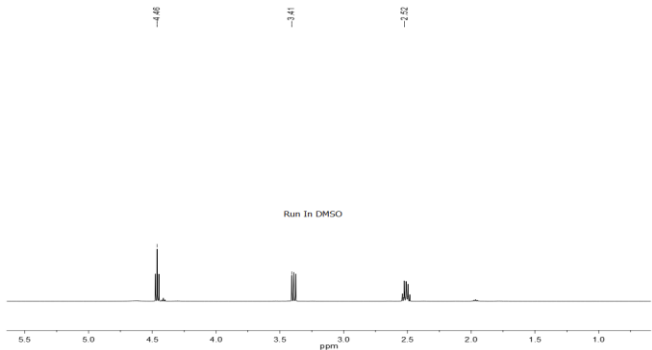
**Structure:**



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



**<sup>1</sup>H-NMR of Proanesultone in DMSO:**



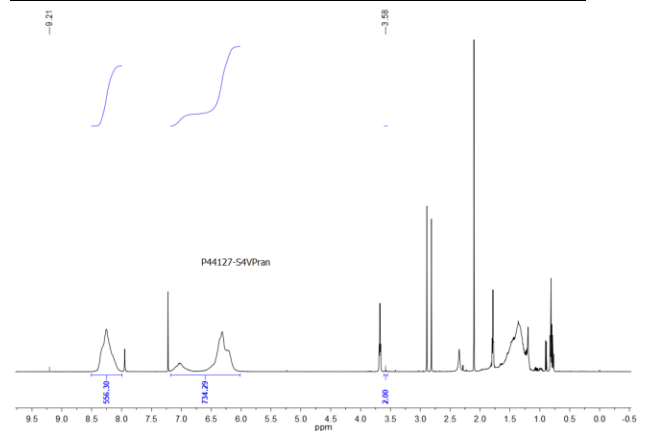
**Characterization:**

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

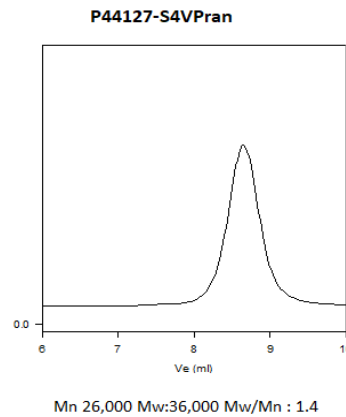
**Solubility:**

<b>CHCl<sub>3</sub></b>	<b>Soluble</b>
<b>DMF</b>	<b>Soluble</b>
<b>THF</b>	<b>in-soluble</b>
<b>Methanol</b>	<b>Soluble</b>
<b>Water</b>	<b>Insoluble</b>

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



**SEC of the random copolymer:**



**$^1\text{H-NMR}$  Spectrum ion  $\text{CdCl}_2$  of the S4VP with propane sultone random copolymer:**

