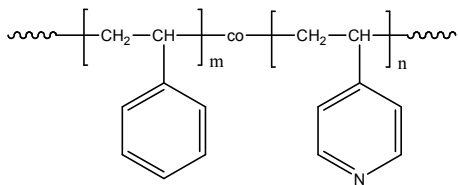


Sample Name:

**Random Copolymer Poly(styrene-co-4-vinpyridine and Methacrylic acid)**

Sample #: **P11311-S4VPMAAran**

**Structure:**



**Composition:**

Mn x 10 <sup>3</sup> PS-co-P4VP-co-MAA	PDI
1,500.00	4.5
S:4VP:MAA	13:74:13

**Synthesis Procedure:**

The polymer is prepared by RAFT process.

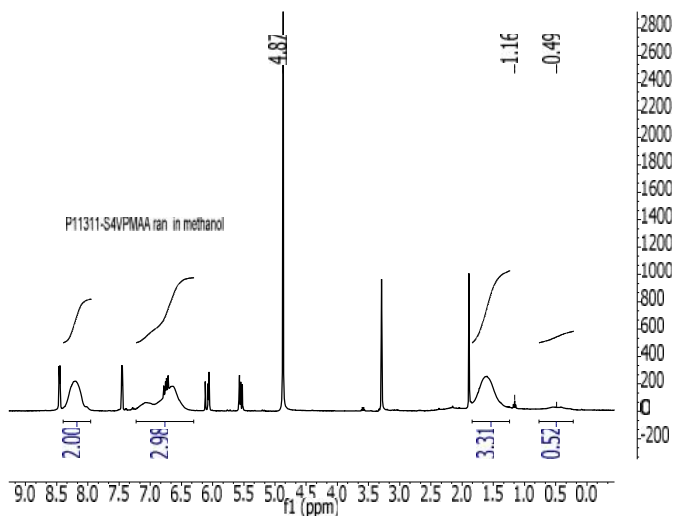
**Characterization:**

The polymer was analyzed by size exclusion chromatography (SEC) to obtain the molecular weight and polydispersity index (PDI). The copolymer composition was calculated from <sup>1</sup>H-NMR spectroscopy by comparing the peak area of 4VP protons at 8.28 ppm with the styrene protons at about 6.1-7.2 ppm that deducts the contribution of the 4VP protons.

**Solubility:**

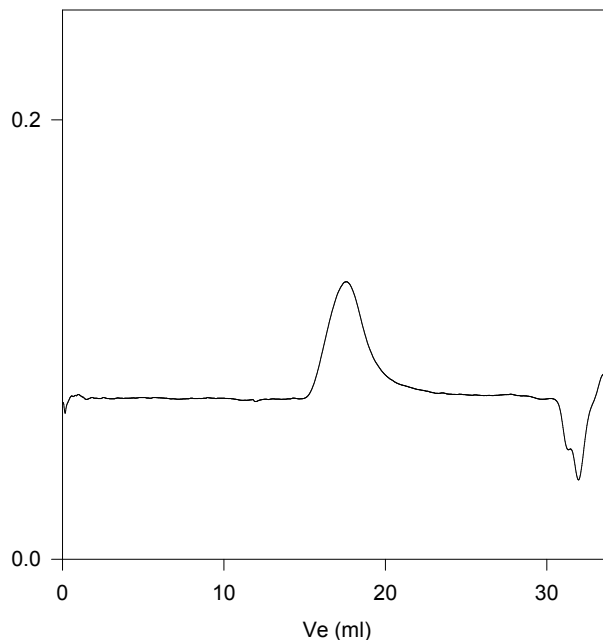
The polymer is soluble in acetone, THF, DMF

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



**SEC of the random copolymer:**

**P11311-S4VPMAA ran**  
**Run in DMF at 60 oC**



Random S4VPMAA: M<sub>n</sub>=1,500,000, M<sub>w</sub>=6,750,000, PI=4.5