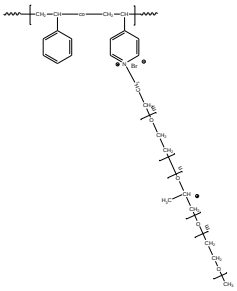
Sample Name:
Poly(styrene–co–[4-vinyl pyridine, quaternized with PEO-PPO-PEO triblock copolymer]), random

Sample #: **P10483C-S4VPQEOPOEOBr**

Structure:



Composition:

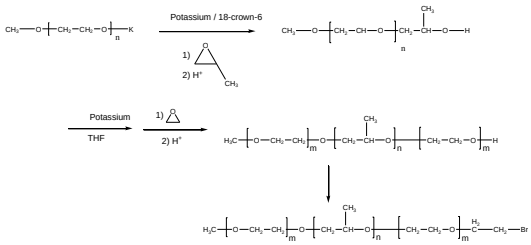
Mn ×10^3 PS-co-P4VP	PDI
125.0	-

% Quaternization with PEOPOEOBr block Mn: 0.310-b-1.3-b-0.670 Dp: 7-b-23-b-15 ≅22%
S:4VP ratio: 20:80

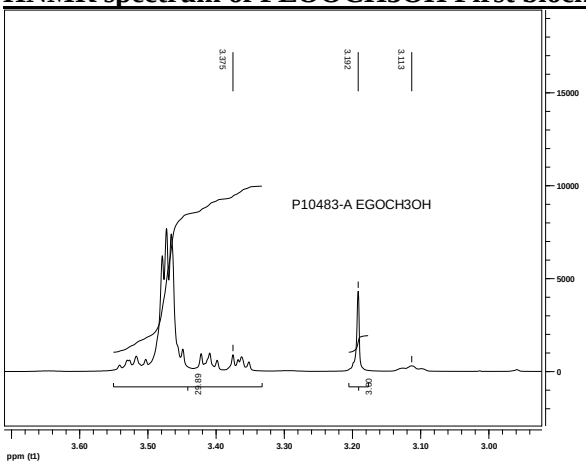
Characterization:
The composition was calculated from ^{1}H-NMR spectroscopy by comparing the peak area of the styrene protons at 6.3-7.2 ppm with the peak area of the 4-vinyl pyridine protons at about 8.5 ppm.

Quaternization. Polymer was dissolved in distilled DMF.
S4VP copolymer: 12.5g
EOPONH-Epoxy Block copolymer: 3.6g
DMF Stirrer at 60 ^{o}C over night
Precipitated in Hot hexane to remove any unreacted EOPO block copolymer;
Yield: 15.6g

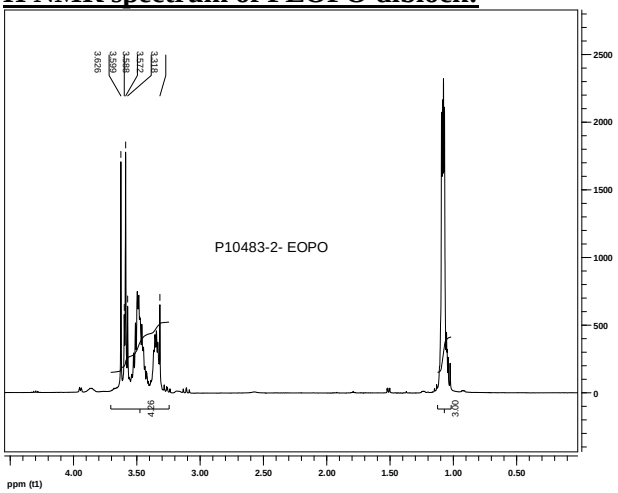
Solubility:
Polymer is soluble in DMF, NMP and DMSO and also in methanol.



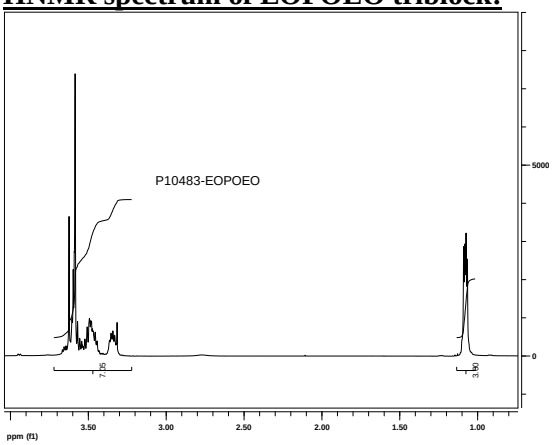
HNMR spectrum of PEOOCH3OH First block:



H NMR spectrum of PEOPO diblock:

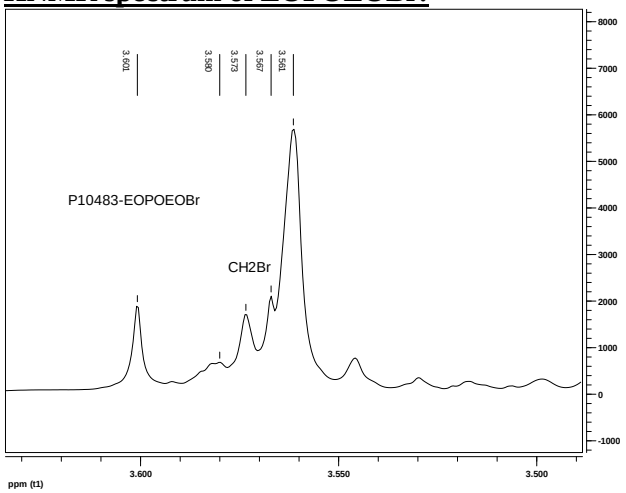


HNMR spectrum of EOPOEO triblock:

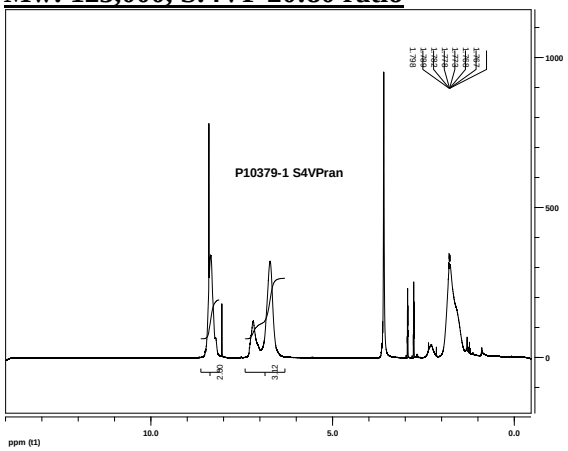


v.R-02

HNMR spectrum of EOPOEOBr:



HNMR of S4VP random copolymers used:
Mw: 125,000, S:4VP 20:80 ratio



HNMR spectrum of the S4VPQEOPOEOBr: