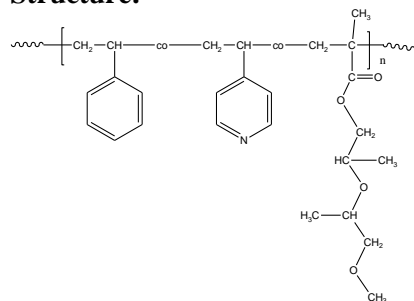


Sample Name: Random Copolymer Poly (styrene-co-4-vinylpyridine –co-propylene glycol methyl ether methacrylate)

Sample #: P40988A-S4VPPGM Aran
Similar to P14263

Structure:



Composition:

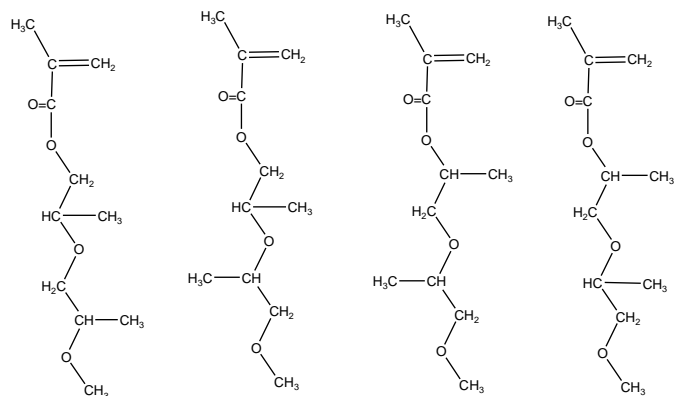
$M_n \times 10^3$	PDI
45.0	1.27
S:4VP: PGMA mole ratio	12:60:28
M_n of Poly(propylene glycol) methacrylate	216

Characterization:

Polymer analyzed by size exclusion chromatography (SEC) to obtain the molecular weight and polydispersity index (PDI). The final block copolymer composition was calculated from $^1\text{H-NMR}$ spectroscopy.

Note: Propylene glycol methacrylate is Dipropylene glycolmethacrylate (dimer): mixture of isomers

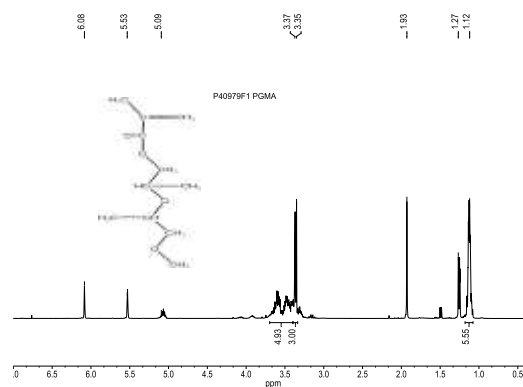
dipropylene glycol methyl ether methacrylate : mixture of isomers



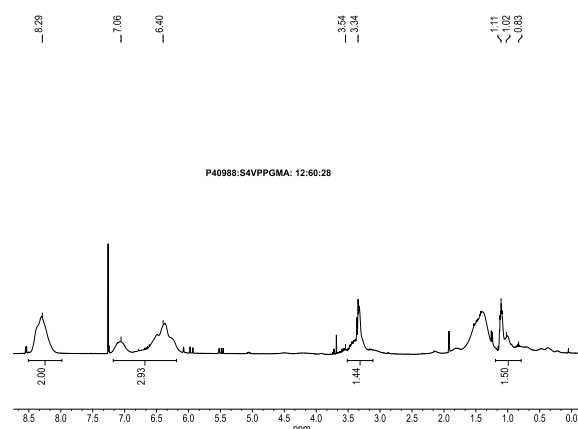
Solubility:

The polymer is soluble in chloroform, DMF, methanol and precipitates from, ether and hexane.

$^1\text{H-NMR}$ of propylene glycolmethacrylate (dimer) monomer used in this synthesis Lot # p40979F1



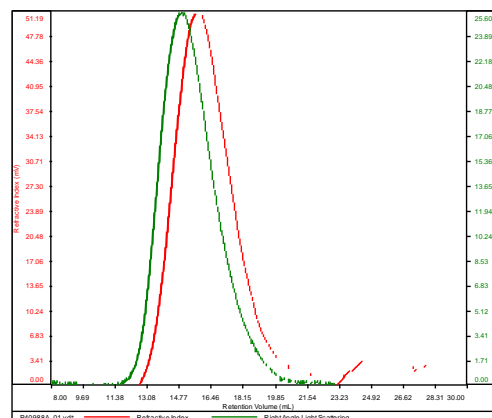
$^1\text{H-NMR}$ spectrum of the polymer:



SEC elugram of the random copolymer:

P40988A-S4VPPGM Aran

Conc	4.6229
dn/dc	0.1650
Solvent	DMF w 0.023M LiBr
Flow Rate	0.7000
Method	PS80k_2018-03-09-0000.vcm



Sample	M_n	M_w	M_p	M_w/M_n	IV
P40988A_01.vdt	44,678	56,920	49,095	1.274	0.4380