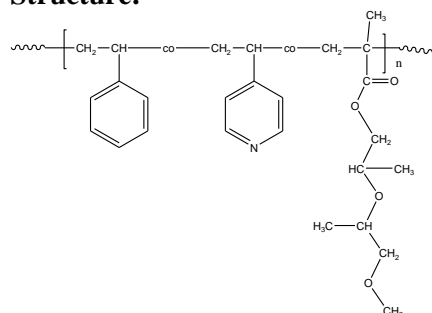


Sample Name: Random Copolymer Poly(styrene-co-4-vinylpyridine-co-propylene glycol methyl ether methacrylate)

Sample #: P41008A-S4VPPGMAran

Structure:



Composition:

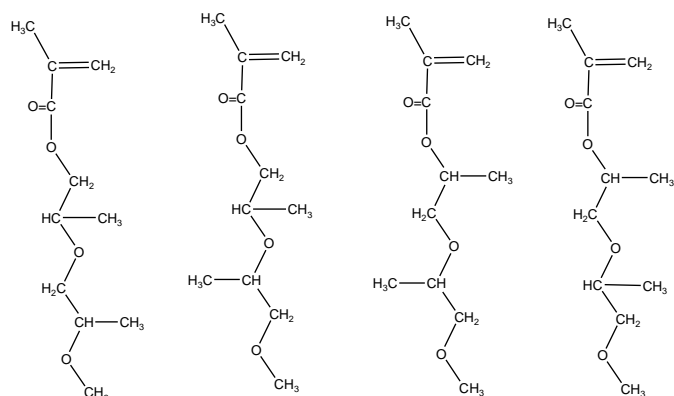
$M_n \times 10^3$	PDI
53.5	1.4
S:4VP: PGMA mole ratio	9:60:31
M_n of Poly(propylene glycol) methacrylate	261

Characterization:

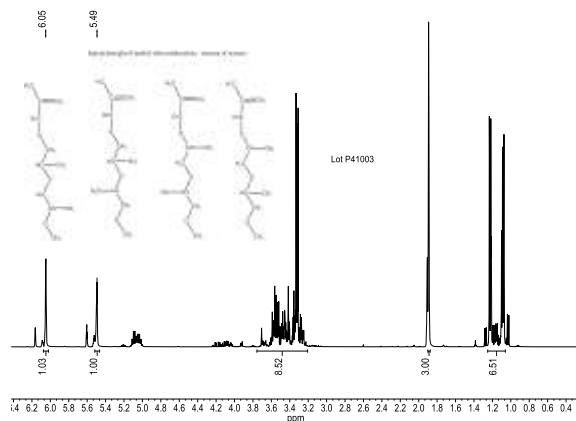
Polymer analyzed by size exclusion chromatography (SEC) to obtain the molecular weight and polydispersity index (PDI). The final block copolymer composition was calculated from $^1\text{H-NMR}$ spectroscopy.

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

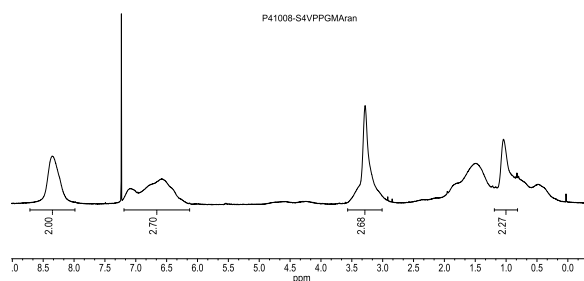
dipropylene glycol methyl ether methacrylate : mixture of isomers



$^1\text{H-NMR}$ of dipropylene glycolmethacrylate (dimer) monomer used in this synthesis (Mixture of isomers):



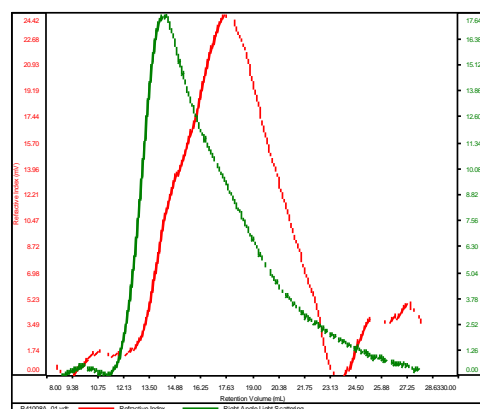
$^1\text{H-NMR}$ spectrum of the polymer:



SEC elugram of the copolymer:

P41008A-S4VPPGMAran

Conc	3.6140
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
P41008A_01.vdt	53,626	74,859	44,962	1.396	0.2466