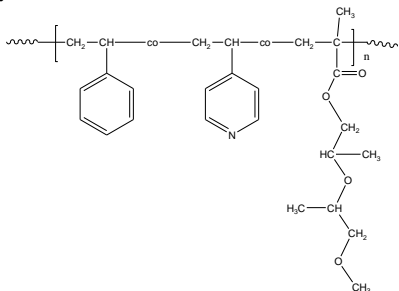


Sample Name: Random Copolymer Poly (styrene-co-4-vinylpyridine –co-propylene glycol methyl ether methacrylate)

Sample #: P41043-S4VPPGMARAN

Structure:



Composition:

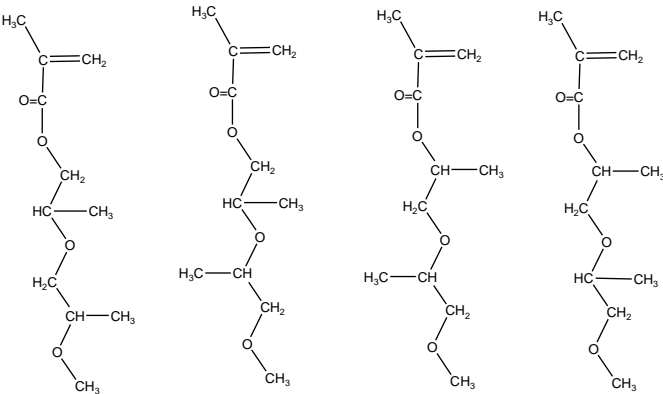
$M_n \times 10^3$	PDI
304.0	1.9
S:4VP: PGMA mole ratio	15:60:25
M_n of Poly(propylene glycol) methacrylate	261

Characterization:

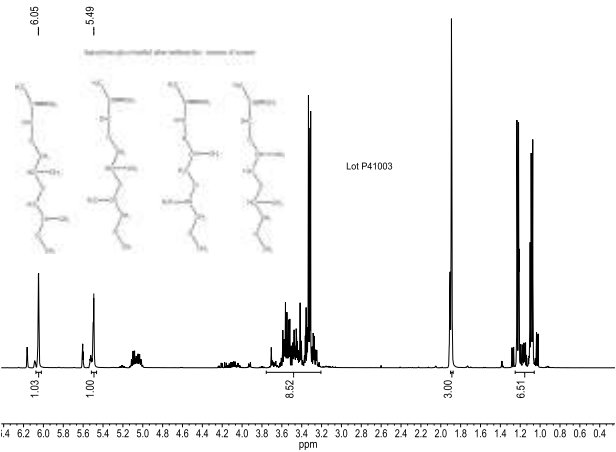
Polymer analyzed by size exclusion chromatography (SEC) to obtain the molecular weight and polydispersity index (PDI). The final block copolymer composition was calculated from $^1\text{H-NMR}$ spectroscopy.

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

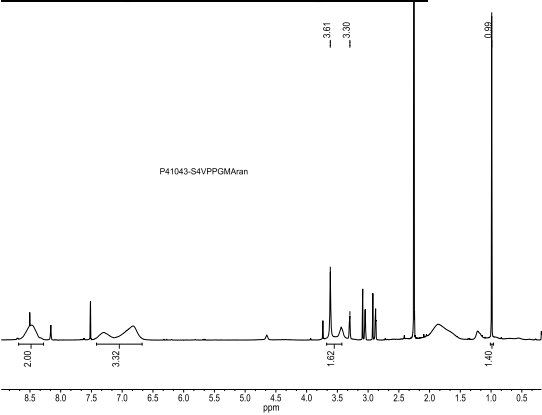
dipropylene glycol methyl ether methacrylate : mixture of isomers



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



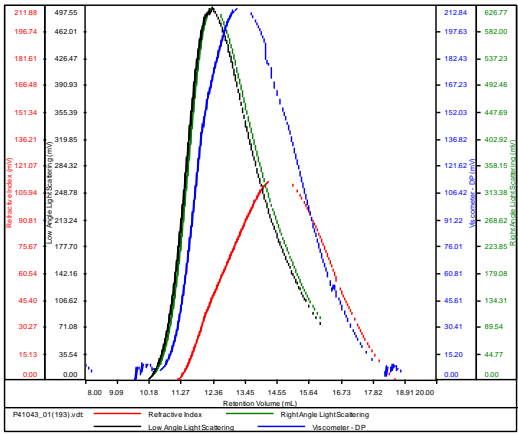
$^1\text{H-NMR}$ spectrum of the polymer:



SEC elugram of the copolymer:

P41043-S4VPPGMARAN

Conc	11.5298
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
P41043_01(193).vdt	304,185	599,066	321,412	1.969	0.8102