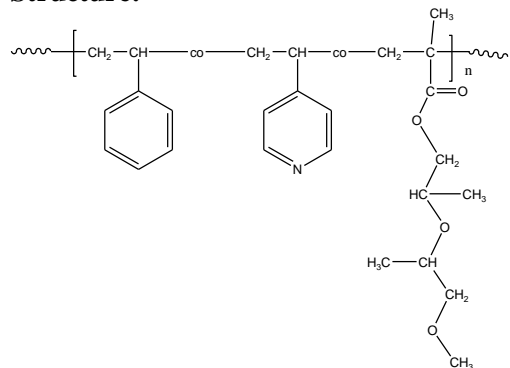


Sample Name: Poly (styrene-co-4vinylpyridine –co-propylene glycol methacrylate) random copolymer

Sample #: P40988-S4VPPGMAn
Similar to P14263

Structure:

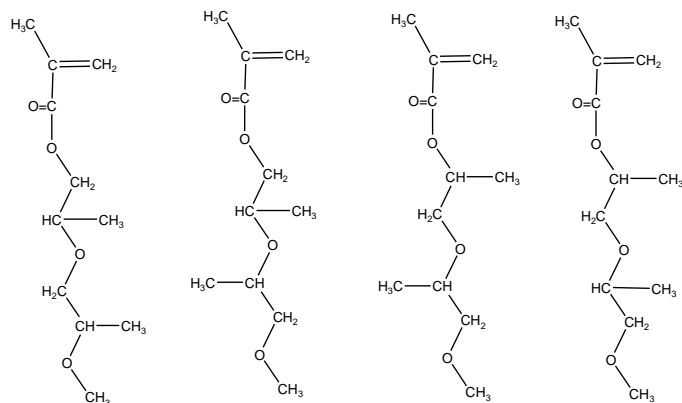


Composition:

Mn $\times 10^3$	PDI
57.5	1.9
S:4VP: PGMA mole ratio	12:60:28
Mn of Poly(propylene glycol) methacrylate	216

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

dipropylene glycol methyl ether methacrylate : mixture of isomers



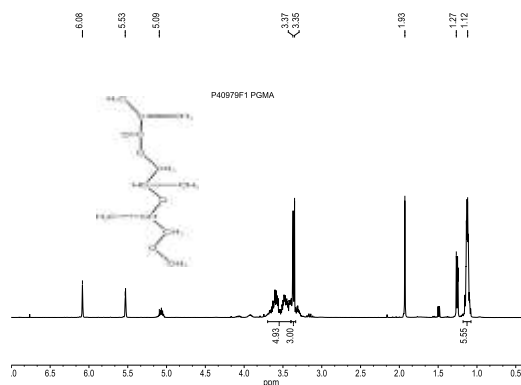
Characterization:

The product was characterized by size exclusion chromatography (SEC) and ^1H NMR.

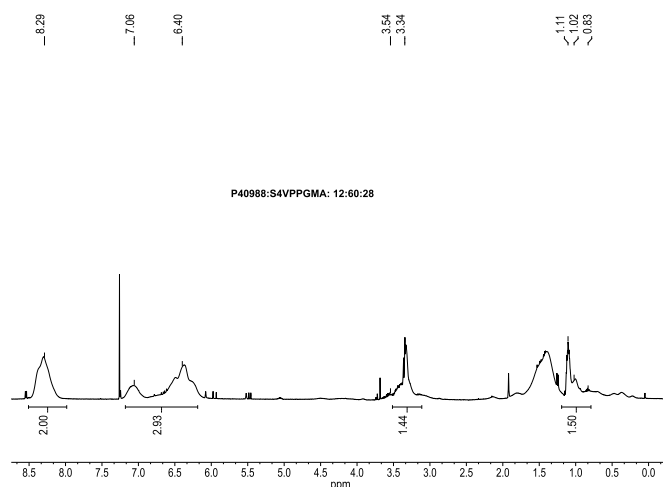
Solubility:

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

^1H NMR of propylene glycolmethacrylate (dimer) monomer used in this synthesis Lot # p40979F1



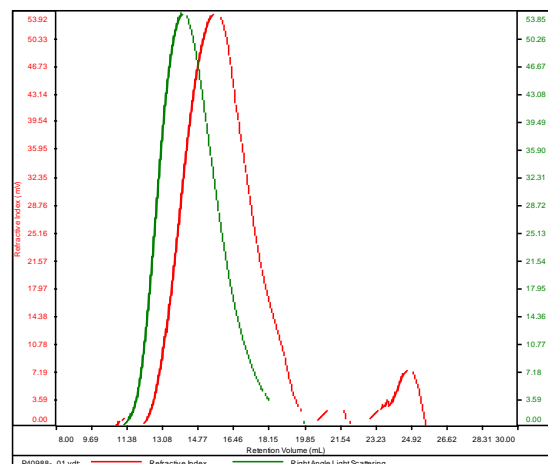
^1H NMR spectrum of the polymer:



SEC elugram of the polymer:

P40988-S4VPPGMAn

Conc	5.1358
dn/dc	0.1650
Solvent	DMF w 0.023M LiBr
Flow Rate	0.7000
Method	PS80k_2018-03-09-0000.vcm



Sample	Mn	Mw	Mp	Mw/Mn	IV
P40988_01.vdt	57,778	110,769	78,365	1.917	0.5297