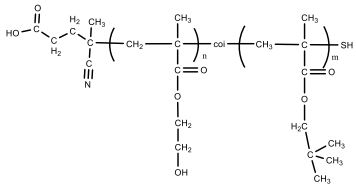
Sample Name:
Random Copolymer Poly (2-Hydroxy ethyl methacrylate-co-Neopentylmethacrylate)

Sample #: **P44234B-HEMANPMAran**

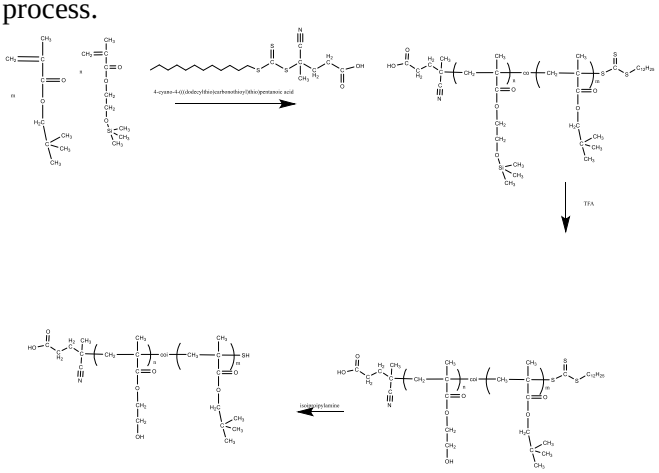
Structure:



Composition:

Mn x 10^3 HEMA-co-NPMA	PDI
10.5	1.02
T_g for the random copolymer: 72.0°C	
HEMA: NPMA molar ratio: 15:85	

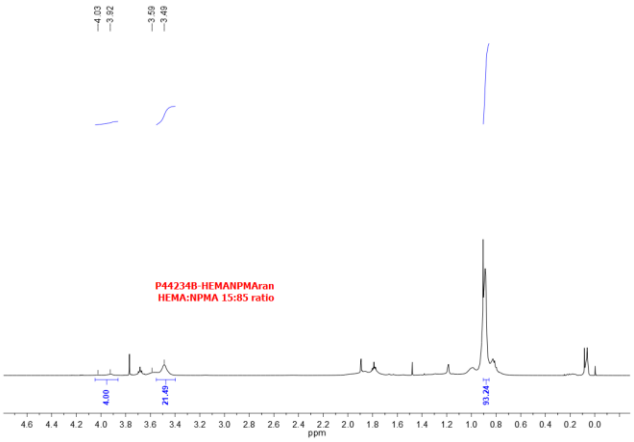
Synthesis Procedure:
The polymer was synthesized by RAFT polymerization process.



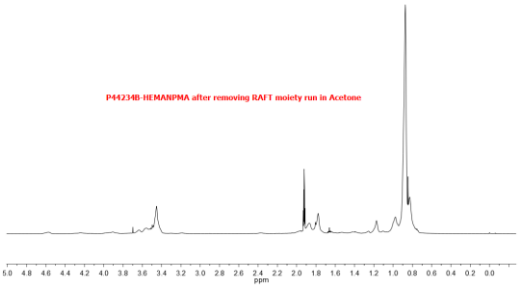
Characterization:
The product was characterized by size exclusion chromatography (SEC) and ^{1}H NMR.

Thermal analysis:
Thermal analysis of the samples was carried out on a TA Q100 differential scanning calorimeter at a heating rate of 10°C/min. The midpoint of the slope change of the heat flow plot of the second heating scan was considered as the glass transition temperature (T_g).

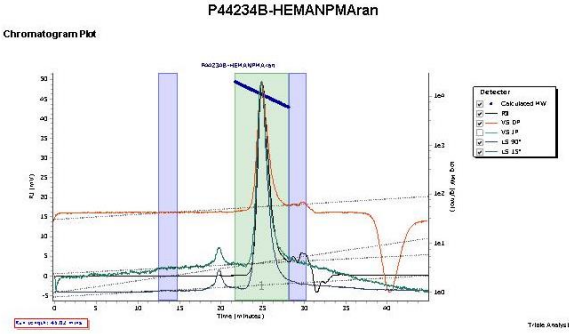
Proton NMR of copolymer: HEMATMSNPMA ran



Proton NMR of copolymer: HEMANPMAran



SEC of the random copolymer:



Molecular Weight Averages

Peak	Mp (g/mol)	Mn (g/mol)	Mw (g/mol)	Mz (g/mol)	Mz+1 (g/mol)	Mv (g/mol)	PD
Peak 1	10854	10278	10428	10570	10702	10548	1.015

DSC thermogram of the Sample: