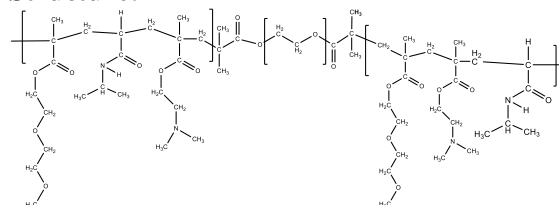


Sample Name: Poly (Diethylene glycol methylethermethacrylate-co-[N,N-dimethylamino]ethyl methacrylate-co-N-isopropyl acrylamide)-b-Poly ethylene glycol-b- Poly (Diethylene glycol methylethermethacrylate-co-[N,N-dimethylamino]ethyl methacrylate-co-N-isopropyl acrylamide),random

Sample #:
P43856B-DEGMEOMADMAEMANIPAM-EG-DEGMEOMADMAEMANIPAM

Structure:



Composition:

Mn PEG Block	Mn total	Mw/Mn
20,000	71,500	1.5
DEGMEOMADMAEMANIPAM-PEG- DEGMEOMADMAEMANIPAM DP: 99-17-3-b-454-b-99-17-3		
Feed mole DEG-MeOMA: 0.180 mole DMAEMA: 0.038 NIPAM: 0.05		

Synthesis Procedure:

The polymer is prepared by ATRP process using α,ω -dibromo PEG.

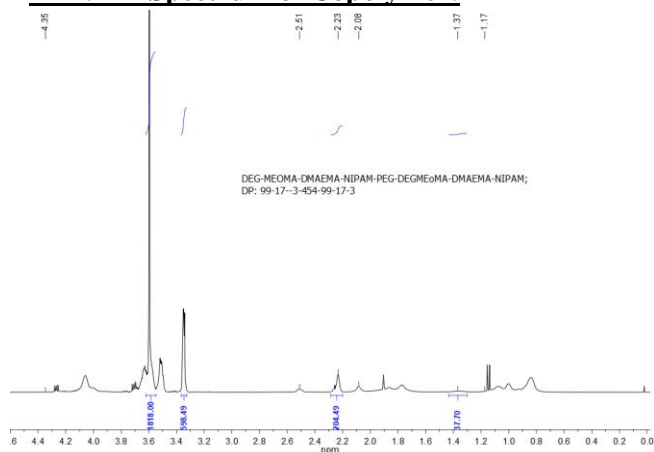
Characterization:

The molecular weight and polydispersity index (PDI) were calculated by SEC using water as an eluent. The copolymer composition was calculated from $^1\text{H-NMR}$ spectroscopy.

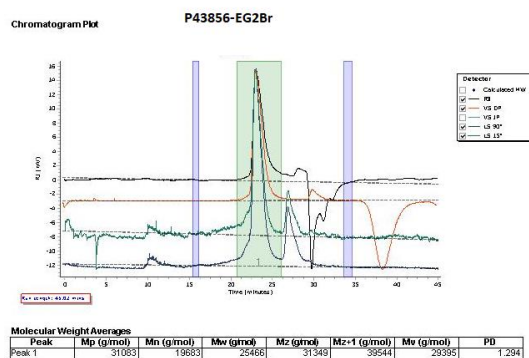
Solubility:

The polymer is soluble in water. **1mg polymer in Water does not give a clear solution, by heating solution to about 40 °c with bubbling CO₂, it gives clear solution immediately.**

$^1\text{H-NMR}$ Spectrum of Copolymer:



SEC elugram of the PEG block:



SEC elugram of the random copolymer:

