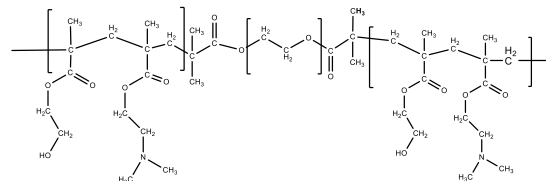Sample Name: **Poly(2-hydroxyethyl methacrylate-co-N,N-dimethylaminoethyl methacrylate)-b-PEG-b-Poly(2-hydroxyethyl methacrylate-co-N,N-dimethylaminoethyl methacrylate),random**

Sample #: **P43956A-HEMADMAEMA-EG-HEMADMAEMA**

Structure:

Composition:

Mn (g mol^{-1}) PEG Block	Mn total (g mol^{-1})	Mw/Mn
20.0	74.0	1.2
HEMADMAEMA-PEG-HEMADMAEMA DP: 209-33-b-454-b-209-33		

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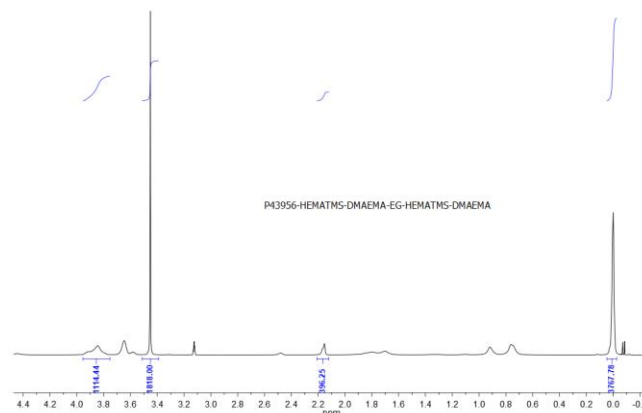The polymer is prepared by ATRP process using α,ω-dibromo PEG.

Characterization:
The molecular weight and polydispersity index (PDI) were calculated by SEC using water as an eluent. The copolymer composition was calculated from ^{1}H-NMR spectroscopy.
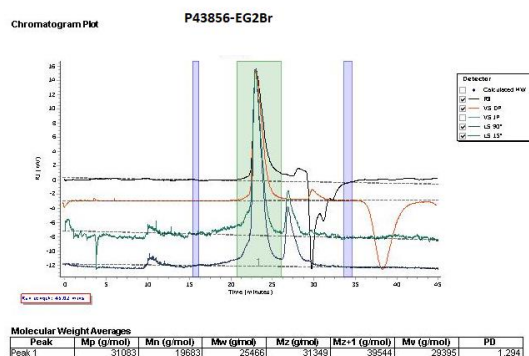
Solubility:
The polymer is soluble in water.

^{1}H-NMR Spectrum of Copolymer:

P43956-HEMATMS-DMAEMA-EG-HEMATMS-DMAEMA

SEC elugram of the PEG Block:

Chromatogram Plot   P43856-EG2Br

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	31083	19683	25466	31349	39544	29395	1.294

SEC elugram of the random copolymer:

Chromatogram Plot   P43956-HEMATMS-DMAEMA-EG-HEMATMS-DMAEMA