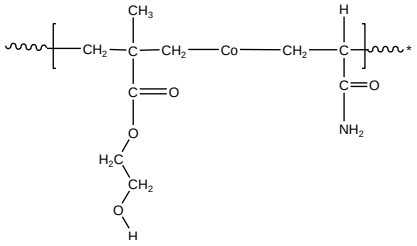
Sample Name: **Random Copolymer Poly (2-Hydroxy ethyl methacrylate-co-Acrylamide)**

Sample #: **P41067C-HEMAAMDran**

Structure:



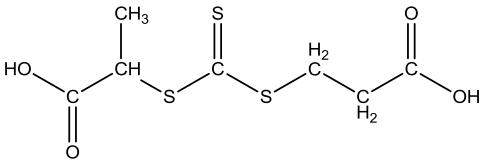
Composition:

Mn x 10^3 HEMA-co-AMD	PDI
40.0	1.3
HEMA:AMD molar ratio	80:20
Solubility in Water	yes

Synthesis Procedure:

The polymer was synthesized by RAFT process using following RAFT reagent:

Structure:

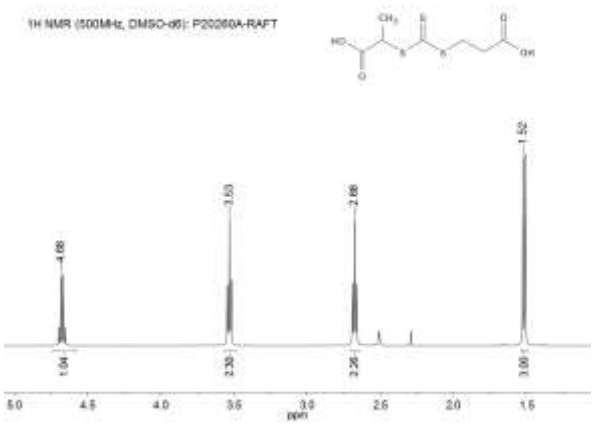


Chemical Formula: $C_7H_{10}O_4S_3$

Molecular Weight: 254.3

Purity:	> 95 %
Storage temperature:	2–8°C

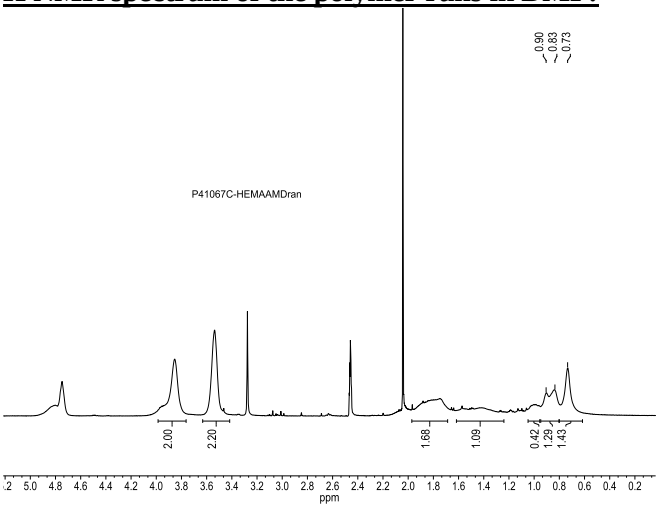
^{1}H NMR spectrum of RAFT reagent (500 MHz, DMSO-d_6):



Characterization:

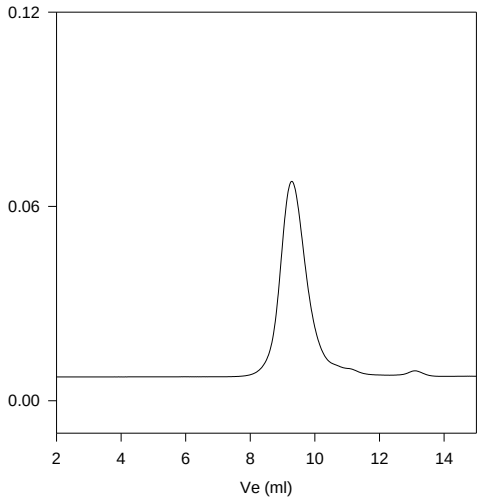
The product was characterized by size exclusion chromatography (SEC) and ^{1}H NMR.

H NMR spectrum of the polymer runs in DMF:



SEC elugram of the polymer:

P41067C-HEMAAMD



Size Exclusion Chromatography of Poly(acrylamide)

Mn :40,000 MW: 52,000 M_w/M_n=1.3