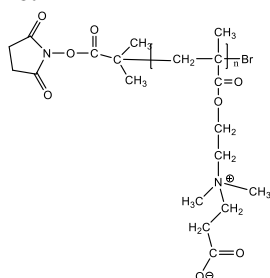


Sample Name:

Poly(carboxybetaine methacrylate), α -N-hydroxysuccinimide-terminated (CBMA) based on (N,N-dimethylaminoethyl methacrylate)

Sample #: **P43757A-CBMA-NHS**

Structure:

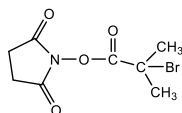


Composition:

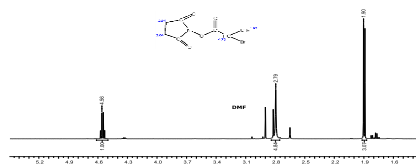
$M_n \times 10^3$	PDI
7.0	1.4

Synthesis Procedure:

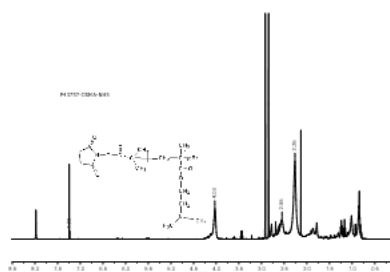
The polymer was synthesized by ATRP polymerization process using following NHS ester ATRP initiator:



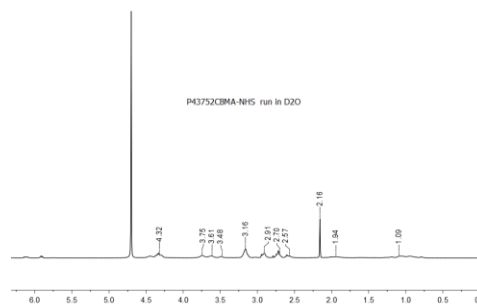
^1H NMR spectrum of ATRP (400 MHz, CDCl_3):



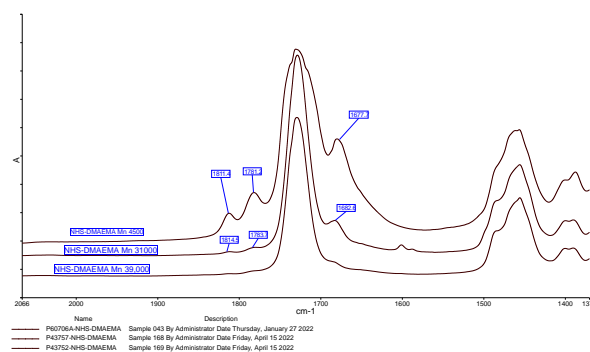
HNMR of NHS-DMAEMA polymer run in D2O:



^1H NMR of polymer run in D2O; NHS-CBMA-NHS showing disappearance chemical shifts at 2.267ppm:



FTIR of the polymer: Showing Characteristic pattern at 1811, 1781 and 1677 Absorbance of NHS terminal group



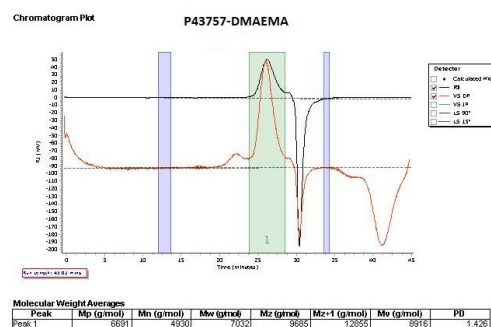
Characterization:

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

Solubility:

Polymer is soluble in water.

SEC elugram of Homopolymer:



Mn of the polymer after reaction with Propiolactone: 7,000