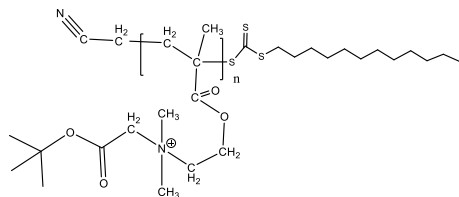


Sample Name: Poly (N,N-dimethylaminoethyl methacrylate, quaternized with tert-butylbromoacetate)

Synonym: Poly(2-[tert-butoxy]-N-[2-methacryloyloxy]ethyl-N,N-dimethyl-2-oxoethanaminium)

Sample#: P41692-DMAEMAQtBuAc

Structure:



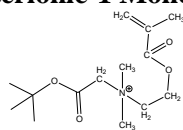
Composition:

$M_n \times 10^3$	PDI
1.5	1.35

Synthesis:

The polymer was synthesized by RAFT polymerization process.

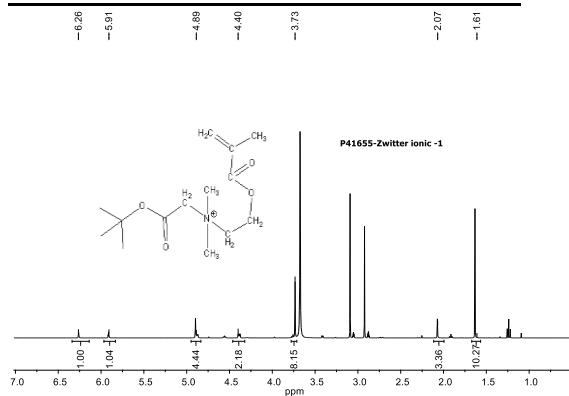
Zwitterionic-1 Monomer Lot#: P41655



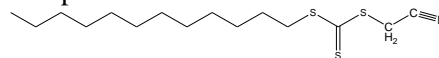
2-(tert-butoxy)-N-(2-methacryloyloxyethyl)-N,N-dimethyl-2-oxoethanaminium
Chemical Formula: $C_{14}H_{26}NO_4^+$
Exact Mass: 272.19
Molecular Weight: 272.36

Composition: purity $\geq 97\%$ (from NMR)

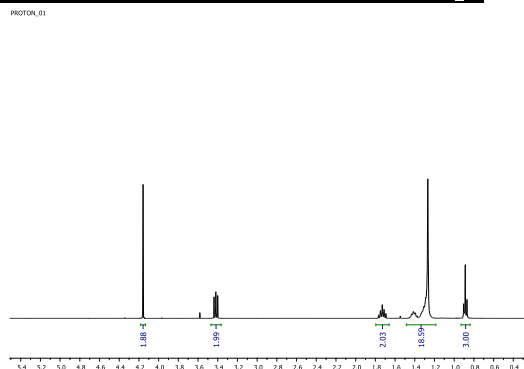
1H NMR of the Zwitterionic-1 monomer:



Using RAFT process:



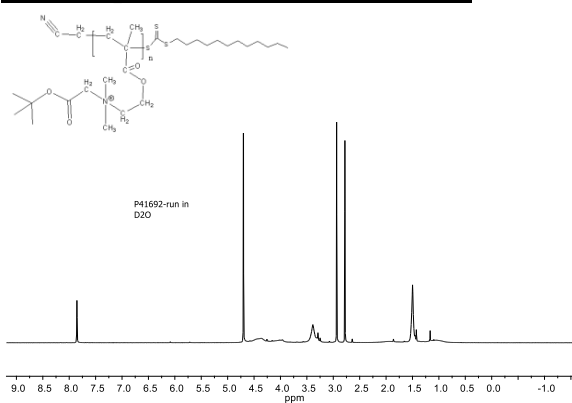
1H NMR of RAFT used (400 MHz, $CDCl_3$):



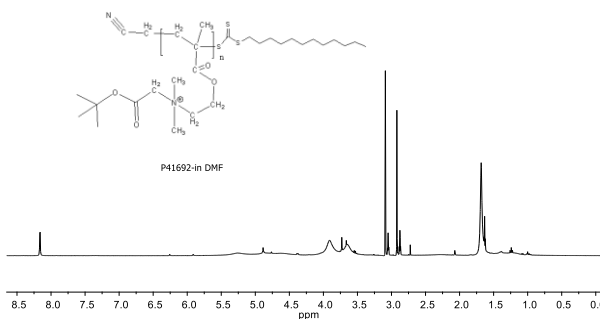
Characterization:

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

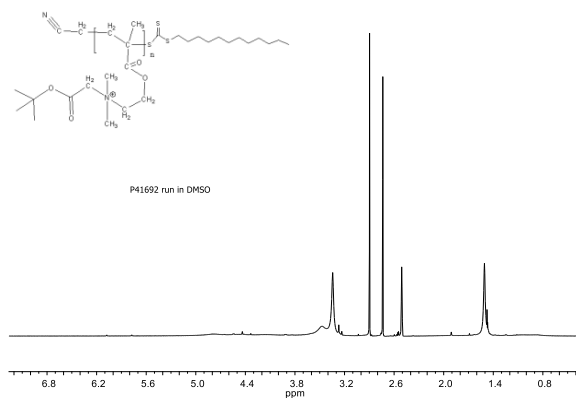
1H NMR spectrum of Polymer in D_2O :



1H NMR spectrum of Polymer in DMF:



HNMR spectrum of Polymer in DMSO:



SEC elugram of the Sample:

P41692-

dn/dc	0.0650
Flow Rate	0.7000
Solvent	DMF with LiBr
Method	PSS column-PMMA60K-Jan3-2019-0006.vcm

