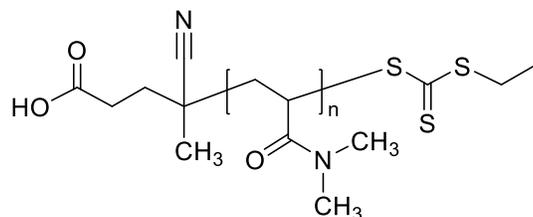


Sample Name: RAFT-terminated
Poly(N,N-dimethylacrylamide)

Sample #: P41432-DMA-RAFT

Structure:



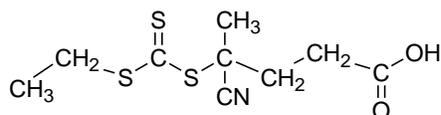
Composition:

Mn x 10 ³	PDI
10.5	1.06

Synthesis Procedure:

The polymer is prepared by RAFT polymerization process.

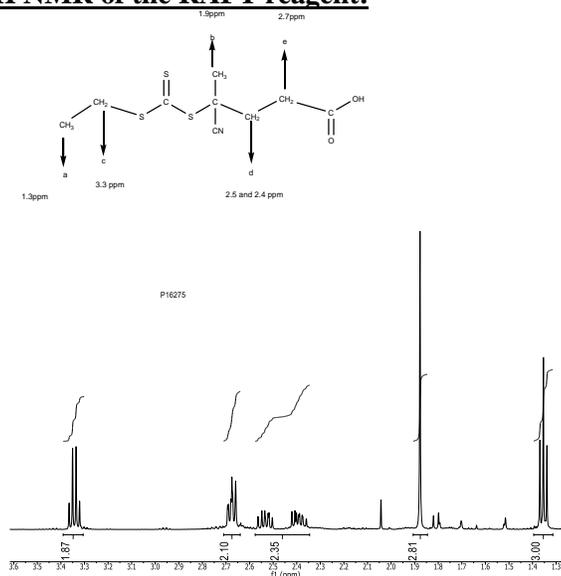
Structure of RAFT reagent:



Composition:

Formula	C ₉ H ₁₃ NO ₂ S ₃
Mw	263.40
Purity	> 90%

¹H NMR of the RAFT reagent:



Characterization:

The molecular weight and polydispersity index (PDI) of the polymer are obtained by size exclusion chromatography in DMF at 50 °C using triple detectors

Solution Viscosity:

Intrinsic viscosity was determined in methanol at 25 °C using Ubbelohde viscometer. Molecular weight is calculated based on the following constant in Methanol at 25 °C:

$$\eta = 0.0175 \times M_v^{0.68}$$

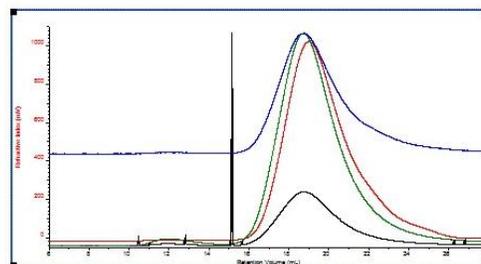
Solubility:

Polymer is soluble in methanol, ethanol and water, and it precipitates in hexane.

SEC chromatogram of the polymer:

P41432-DMA

dn/dc	0.0870
Flow	0.7000
Solvent	DMF with LiBr
Method	PSS column-PMMA64K-Oct2018-0006.vcm



Sample	Mn	Mw	Mz	IV	Mw/Mn
P41432_1_2018-10-30	10,428	11,083	12,043	0.1036	1.063