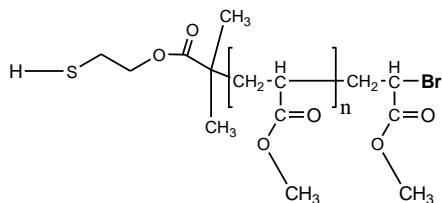


Sample Name:
Poly (methyl acrylate), α -thiol-terminated

Sample # **P16379-MASH**

Structure:

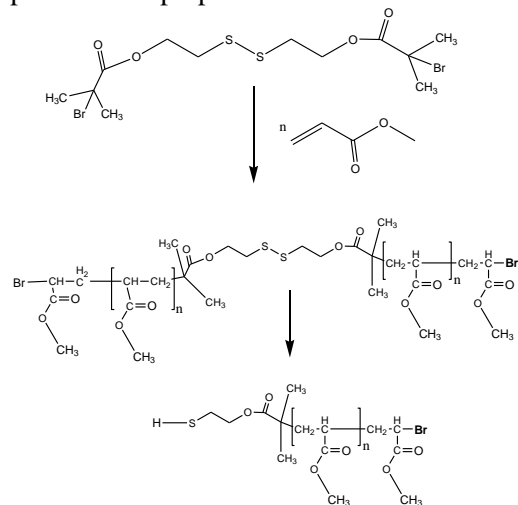


Composition:

Mn x 10 ³	6.5
PDI	1.35
Functionality	~80%

Synthesis procedure:

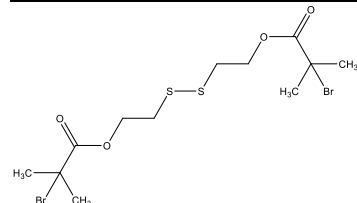
The polymer was synthesized by ATRP polymerization process. The following reaction scheme shows how the product was prepared:



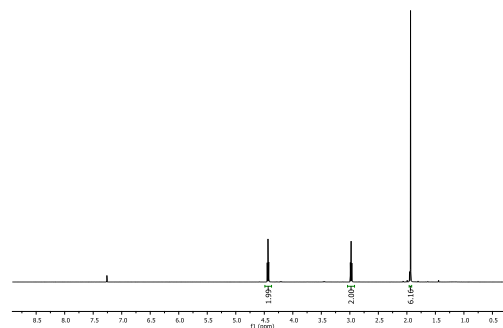
Characterization:

The polydispersity was characterized by size exclusion chromatography (SEC) and molecular weight was calculated from ¹H NMR. The functionality was confirmed by disappearance of methylene proton adjacent to disulfide bond at 2.9 ppm and appearance of thiol proton at 2.7 ppm.

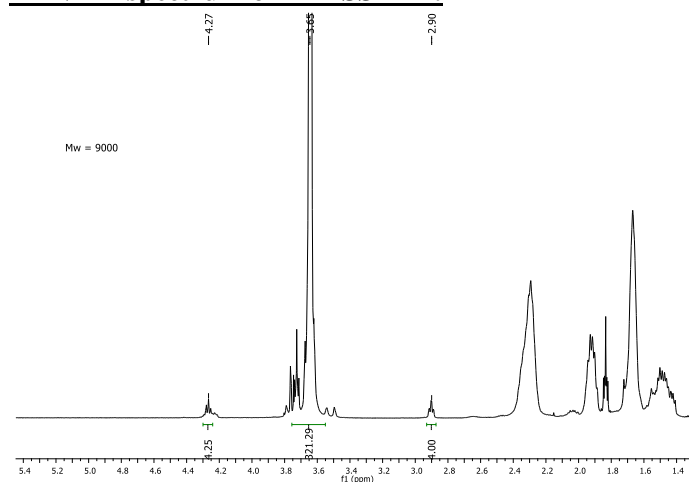
Structure of ATRP initiator:



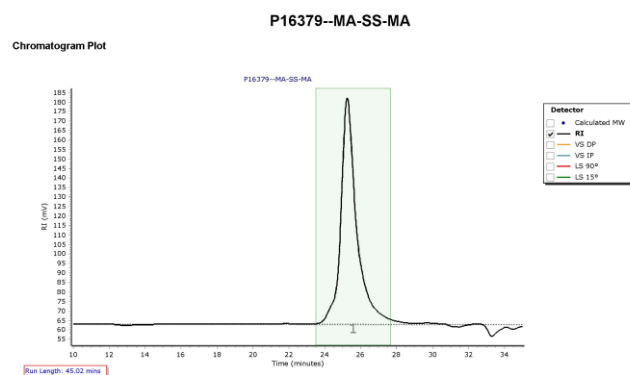
¹H NMR of ATRP initiator:



¹H NMR spectrum of MA-SS-MA:

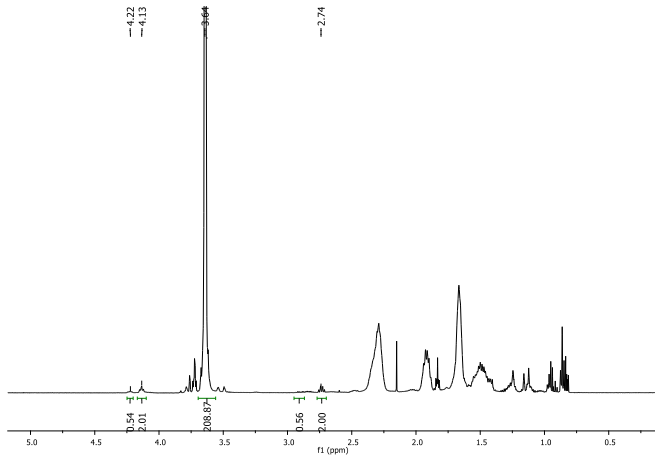


SEC elugram of MA-SS-MA:



Peak	Mp (g/mol)	Mn (g/mol)	Mw (g/mol)	Mz (g/mol)	Mz+1 (g/mol)	Mv (g/mol)	PD
Peak 1	10337	9062	9780	10392	10981	10307	1.076

¹H NMR spectrum of MA-SH Sample:



SEC elugram of MA-SH:

