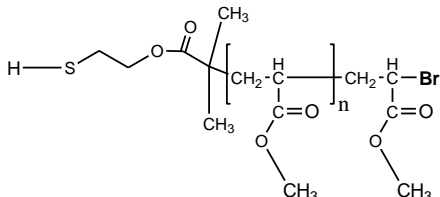


Sample Name:

**Poly (methyl acrylate),  $\alpha$ -thiol-terminated  
(obtained by ATRP)**

Sample # P41644-MASH

**Structure:**

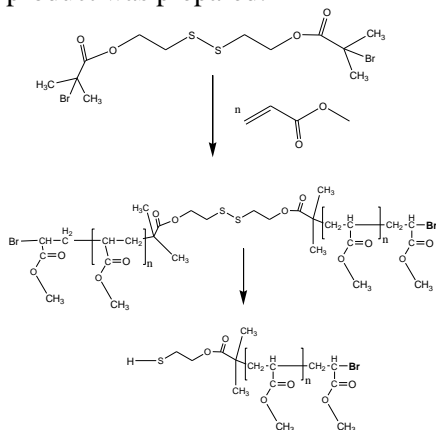


**Composition:**

| Mn x 10 <sup>3</sup> | PDI |
|----------------------|-----|
| 1.1                  | 1.3 |

**Synthesis procedure:**

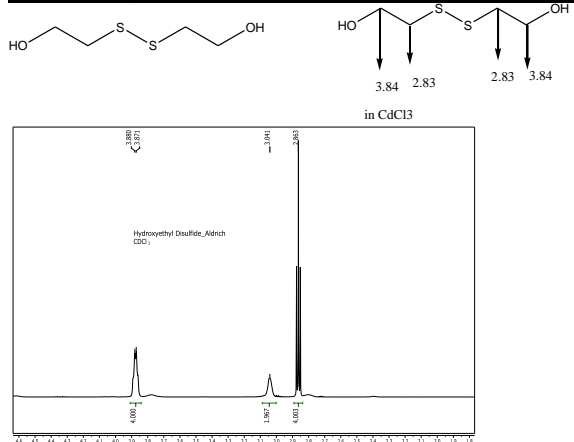
The polymer was synthesized by ATRP polymerization process. The following reaction scheme shows how the product was prepared:



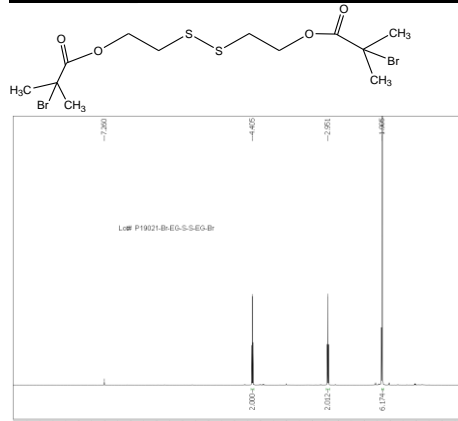
**Characterization:**

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

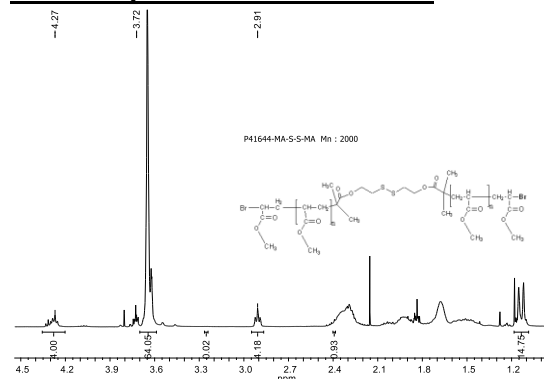
**<sup>1</sup>H NMR spectrum of Hydroxyethyl Disulfide:**



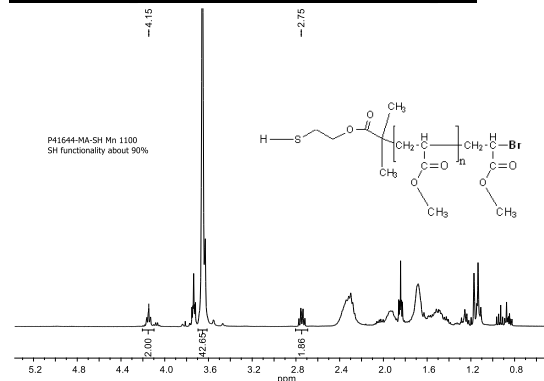
**<sup>1</sup>H NMR spectrum of ATRP initiator:**



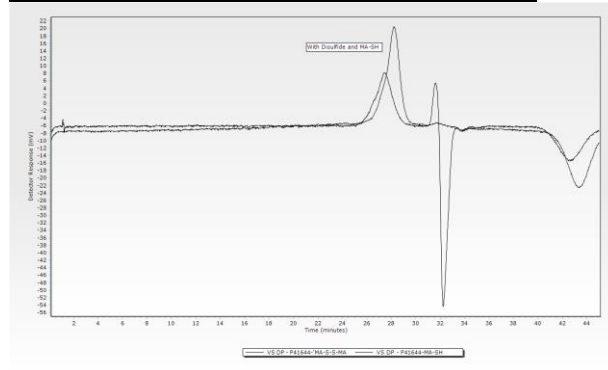
**<sup>1</sup>H NMR spectrum of MA-SS-MA:**



**<sup>1</sup>H NMR spectrum of MA-SH sample:**



**SEC elugram of MA-SS-MA and MA-SH:**



**Mn: 1,100 -Mw/Mn: 1.3**