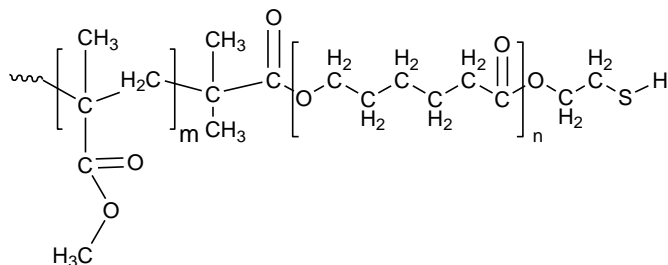


Sample Name:

Thiol end-functionalized Poly(methyl methacrylate-*b*- ϵ -caprolactone)

Sample #: P20022A2-6A-MMA-CL-SH

Structure:



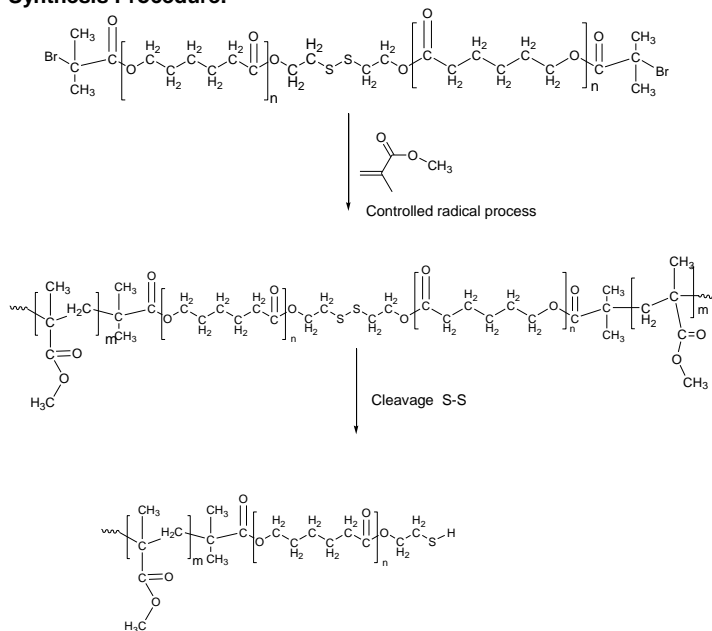
Composition:

$M_n \times 10^3$ MMA- <i>b</i> -CL-SH	PDI
2.0–3.4	1.3
SH functionality >95% *	

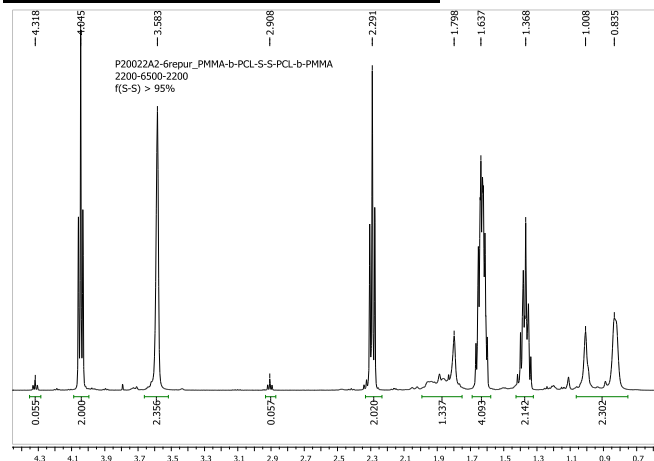
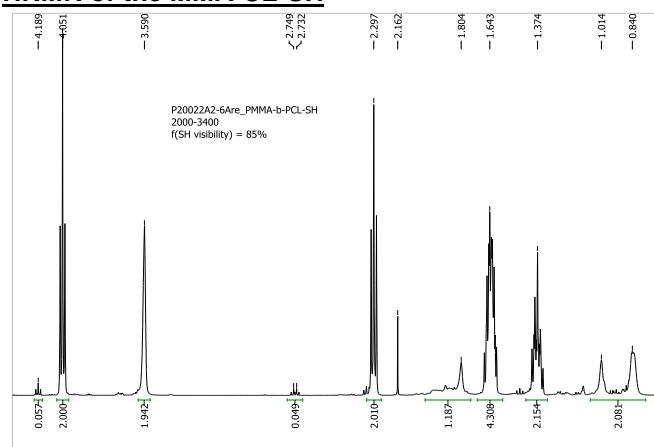
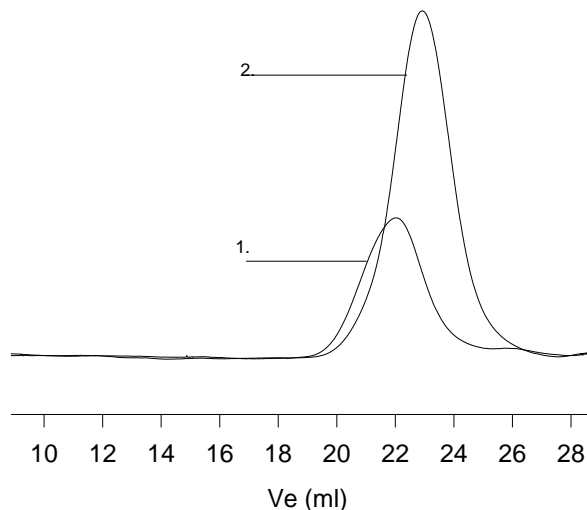
* – SH-functionality is judged based on complete disappearance of the peak at 2.91 ppm, as the terminal groups in block copolymers might not give correct integration value due to the aggregation processes in solution.

Oxidation of PMMA-CL-SH in THF by oxygen in presence of Iodine as catalyst leads to quantitative re-formation of disulfide linkage, indicating that most of the end chains possess free SH-group.

Synthesis Procedure:



Characterization:
By SEC and HNMR:

HNMR of the MMA-CL-S-S-CLMMA**HNMR of the MMA-CL-SH****SEC of the block copolymer:****P20022A2-6A-MMA-CL-SH**

Size-exclusion chromatography of the product:

1. MMA-CL-S-S-CLMMA, $M_w / M_n = 1.3$
2. MMA-CL-SH, $M_w / M_n = 1.3$