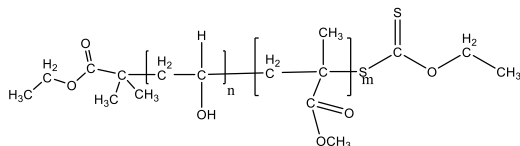


**Sample Name:** Poly (vinyl alcohol-b-methyl methacrylate)

**Sample #:** P42345H-VAMMA

**Structure:**



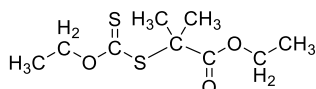
**Composition:**

$M_n \times 10^3$ VA-b-MMA	PDI
5.5-b-224.0	1.48
Solubility: Methanol Cloudy; DMSO clear solution	

**Synthesis Procedure:**

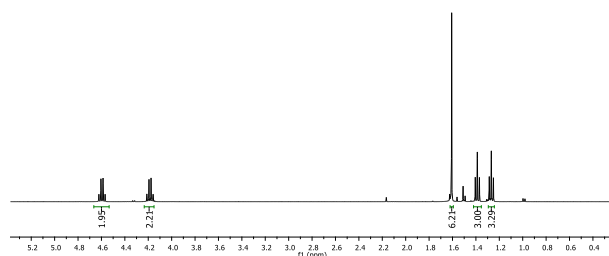
The polymer was synthesized by RAFT polymerization process using following RAFT reagent:

**Structure:**



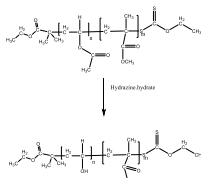
Chemical Formula:  $C_9H_{16}O_3S_2$   
Exact Mass: 236.05

**$^1H$  NMR spectrum of RAFT (400 MHz,  $CDCl_3$ ):**

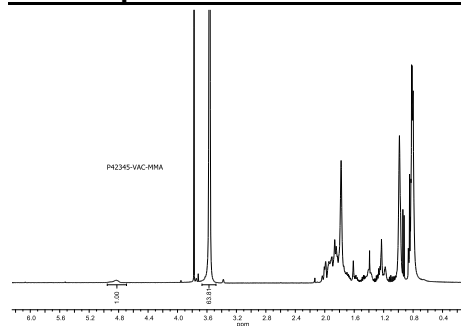


**Characterization:**

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



**HNMR spectrum of PVAC-b-PMMA:**

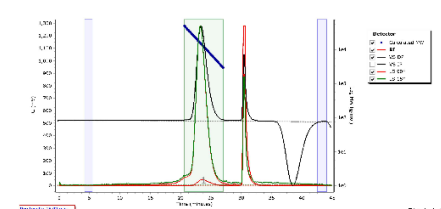


**SEC of PVAC-RAFT Macroinitiator:**

Agilent GPC/SEC Software

P42345-VAC-RAFT

Chromatogram Plot



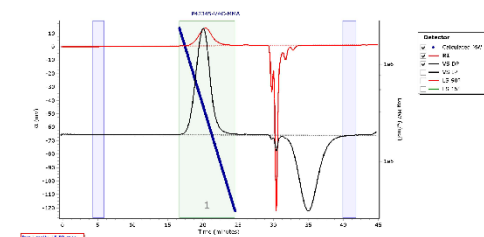
Peak	Mp (g/mol)	Mn (g/mol)	Mw (g/mol)	Mz (g/mol)	Mz+1 (g/mol)	Mw (g/mol)	PDI
Peak 1	11000	10000	11000	11000	11000	11000	1.00

**SEC of the block copolymer:**

Agilent GPC/SEC Software

P42345-VAC-MMA

Chromatogram Plot



Peak	Mp (g/mol)	Mn (g/mol)	Mw (g/mol)	Mz (g/mol)	Mz+1 (g/mol)	Mw (g/mol)	PDI
Peak 1	308117	287115	348061	477095	650067	455065	1.483

**FTIR spectrum of the Polymer:**

