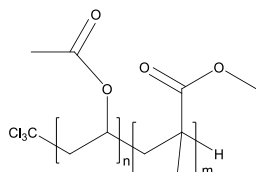


**Sample Name:** Poly (vinyl acetate–b–methyl methacrylate)

**Sample #:** P42343-VAcMMA

**Structure:**



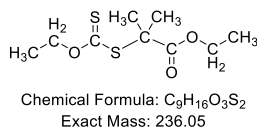
**Composition:**

$M_n \times 10^3$ VAc–b–MMA	PDI
1.8–96.0	2.0

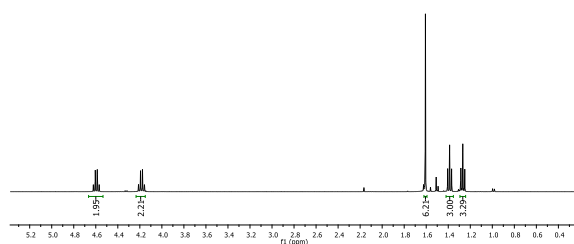
**Synthesis Procedure:**

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

**Structure:**



**<sup>1</sup>H NMR OF RAFT (400 MHz, CDCl<sub>3</sub>):**



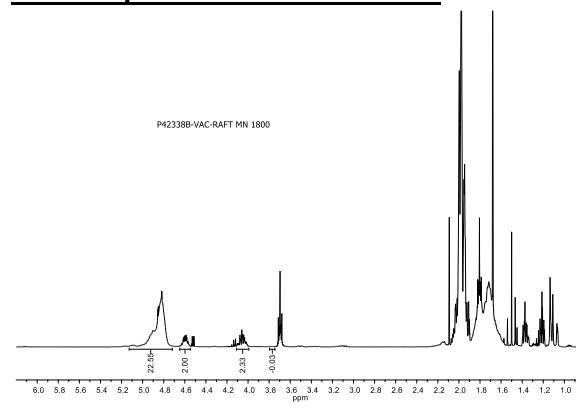
**Characterization:**

Poly(vinyl acetate) was characterized by size–exclusion chromatography (SEC) to estimate  $M_n$  (PS standards) and polydispersity (PDI). NMR was used to confirm structure.  $M_n$  of PVAc–b–PMMA was estimated from NMR using SEC  $M_n$  of PVAc as a reference, and PDI was estimated from SEC.

**Solubility:**

The polymer is soluble in THF, Acetone and CHCl<sub>3</sub>. It precipitates from Hexane.

**HNMR spectrum of PVAc-RAFT:**

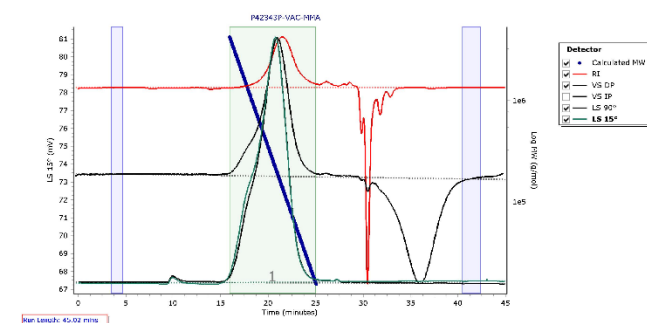


**SEC elugram of the block copolymer:**

Agilent GPC/SEC Software

P42343P-VAc-MMA

Chromatogram Plot



Peak	Mp (g/mol)	Mn (g/mol)	Mw (g/mol)	Mz (g/mol)	Mz+1 (g/mol)	Mv (g/mol)	PD
Peak 1	135424	68496	199101	450892	949944	302869	2.021