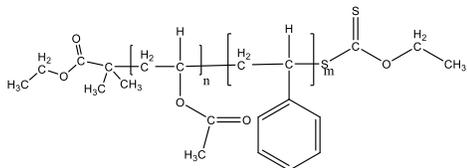


Sample Name: Poly (vinyl acetate–b–styrene)

Sample #: P42340AF-VAcS

Structure:

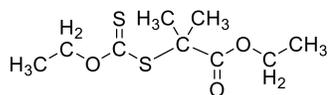


Composition:

$M_n \times 10^3$ VAC-b-S	PDI
10.0-b-3.0	1.7

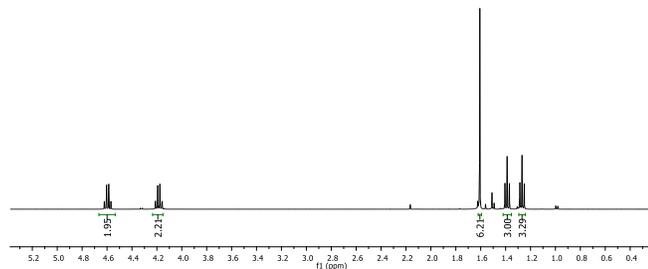
Synthesis Procedure:

The product was obtained by successive RAFT polymerization of vinyl acetate and styrene using AIBN as a radical initiator and the following chain transfer agent:



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

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



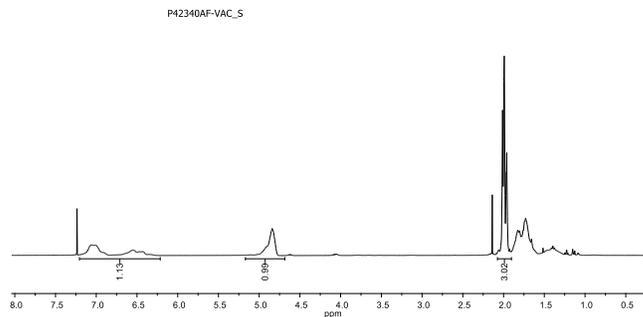
Characterization:

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

Solubility:

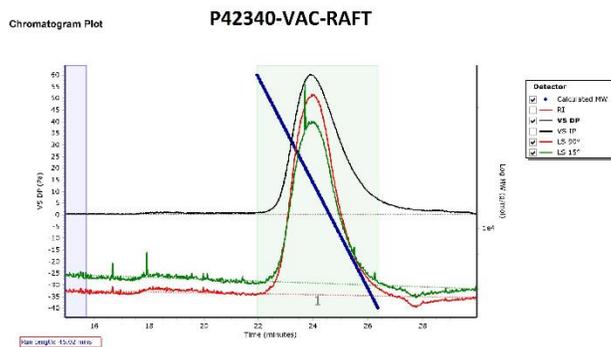
The polymer is soluble in THF, Acetone and $CHCl_3$. It precipitates from MeOH and Hexane.

1H NMR spectrum of PVAc–b–PS Sample:



SEC elugram of VAC-RAFT macroinitiator:

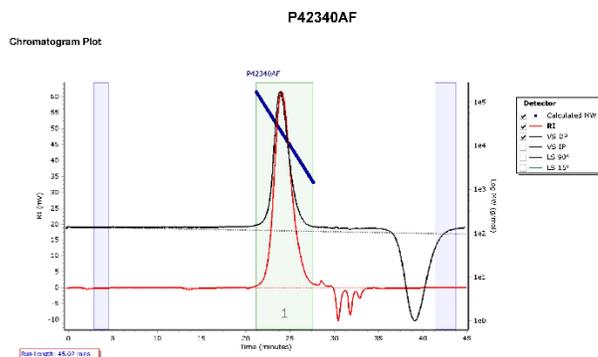
Agilent GPC/SEC Software



Peak	Mp (g/mol)	Mn (g/mol)	Mw (g/mol)	Mz (g/mol)	Mz+1 (g/mol)	Mv (g/mol)	PD
Peak 1	13730	10041	12406	14965	17384	14655	1.235

SEC elugram of the block copolymer:

Agilent GPC/SEC Software



Peak	Mp (g/mol)	Mn (g/mol)	Mw (g/mol)	Mz (g/mol)	Mz+1 (g/mol)	Mv (g/mol)	PD
Peak 1	20751	12926	22426	39761	56415	29710	1.738