## Sample Name: Poly (vinyl acetate-b-styrene)

# Sample #: P42340-VAcS

### **Structure:**

### **Composition:**

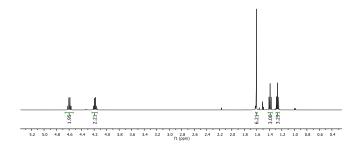
$\begin{array}{c} M_n \times 10^3 \\ VAC-b-S \end{array}$	PDI
10.0-b-89.0	1.5

# **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<sub>9</sub>H<sub>16</sub>O<sub>3</sub>S<sub>2</sub> Exact Mass: 236.05

### <sup>1</sup>H NMR spectrum of RAFT (400 MHz, CDCl<sub>3</sub>):



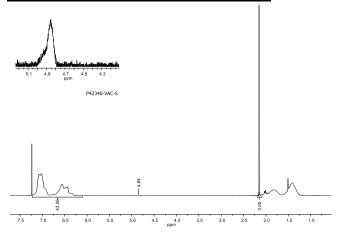
# **Characterization:**

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

### **Solubility:**

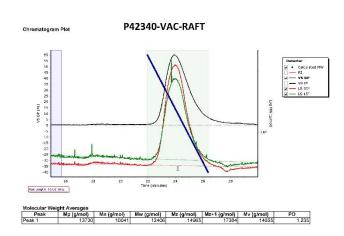
The polymer is soluble in THF, Acetone and CHCl<sub>3</sub>. It precipitates from MeOH and Hexane.

# H NMR spectrum of PVAc-b-PS Sample:



# **SEC elugram of VAC-RAFT macroinitiator:**

### Agilent GPC/SEC Software



# **SEC** elugram of the block copolymer:

# ### Peak | Mp (g/mo) | Mg (g/m