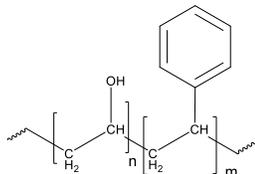


**Sample Name: Poly(vinyl alcohol)-b-poly(styrene)**

**Sample #: P42328-VAS**

**Structure :**

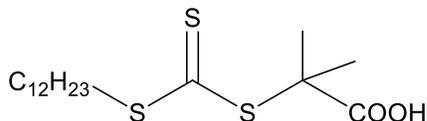


**Composition :**

|                             |     |
|-----------------------------|-----|
| $M_n \times 10^3$<br>VA-b-S | PDI |
| 2.0-b-3.0                   | 2.0 |

**Synthesis Procedure:**

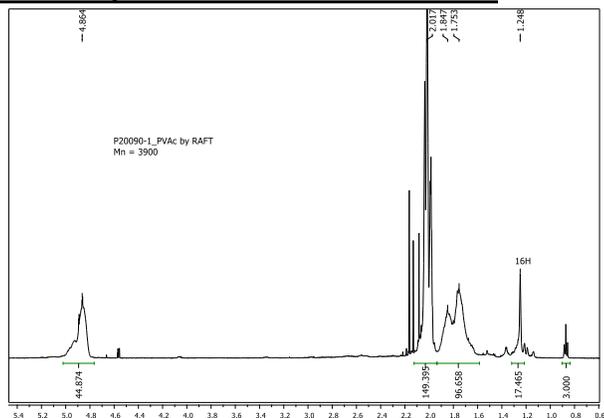
The product was obtained by successive RAFT polymerization of vinyl acetate and styrene using V501 as a radical initiator and the following chain transfer agent:



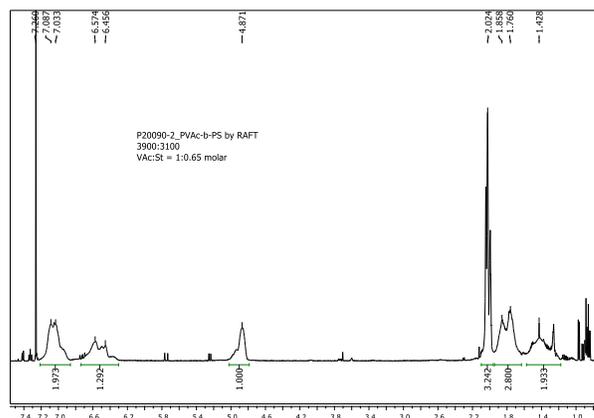
**Characterization:**

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

**HNMR spectrum of PVAc -RAFT used:**

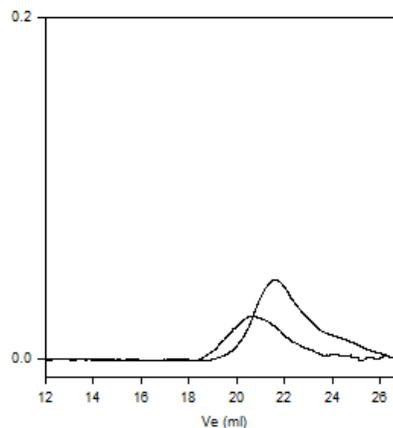


**HNMR spectrum of PVAc-b-PS:**



**SEC profile of the block copolymer:**

**P42328-S-VAC**



Size exclusion chromatography result:

**S-b-VAC: 3,000-b-3900 Mw/Mn 2.0**