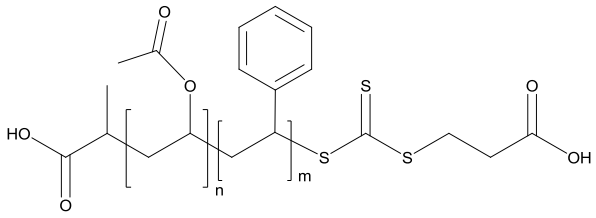
Sample Name:
Poly(vinyl acetate–b–styrene)

Sample #: P20087-2–VAcS

Structure:

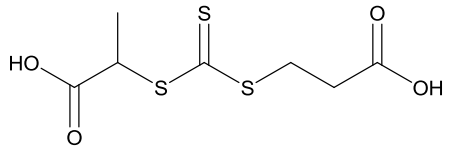


Composition:

$M_n \times 10^3$ VAc–b–St	PDI
0.4–5.0	1.5
VAc:St = 1:10 (NMR)	

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:

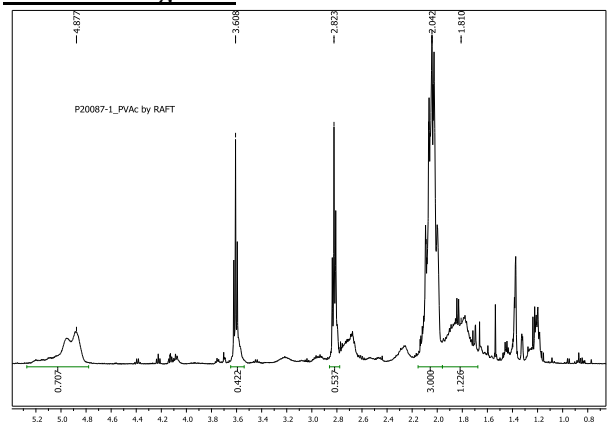


Characterization:

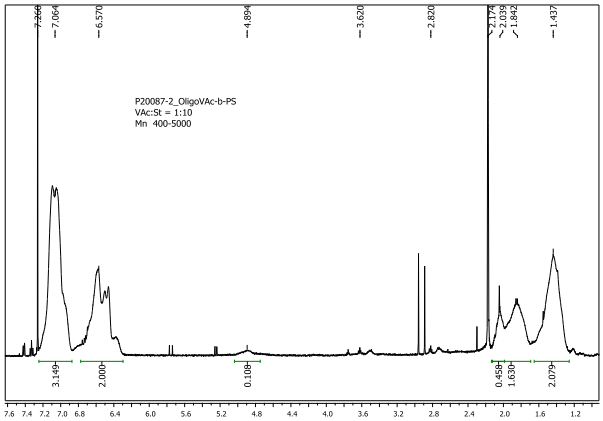
Oligo(vinyl acetate) was characterized by size–exclusion chromatography (SEC) to estimate M_n (PS standards) and polydispersity (PDI). NMR was used to confirm the structure. M_n of PVAc–b–PS was estimated from NMR using SEC M_n of OligoVAc as a reference, and PDI was estimated from SEC.

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

HNMR of OligoVAc

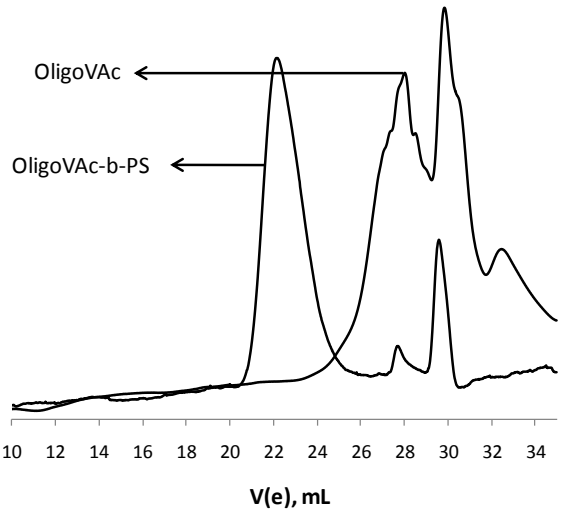


HNMR of OligoVAc–b–PS



SEC of the block copolymer:

P20087-2–VAc-b-St



OligoVAc, $M_n = 400$
OligoVAc–b–PS, $M_n = 6300$, $M_w / M_n = 1.5$