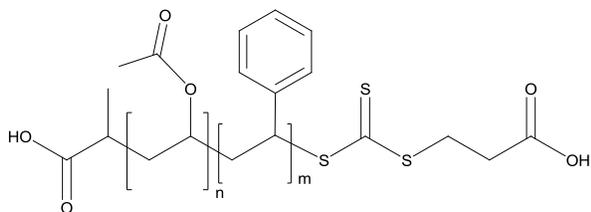


Sample Name: Poly(vinyl acetate–b–styrene)

Sample #: P20088-VAcS

Structure:

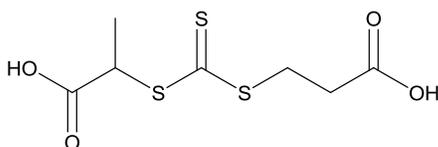


Composition:

$M_n \times 10^3$ VAc–b–S	PDI
3.5–b–3.8	2.8
VAc:St = 1:0.9 (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:



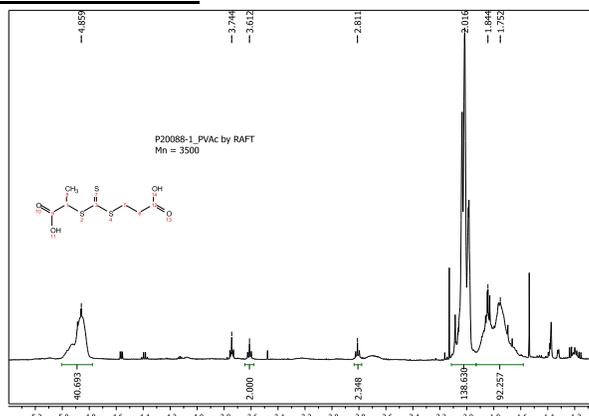
Characterization:

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 NMR M_n of PVAc as a reference, and PDI was estimated from SEC.

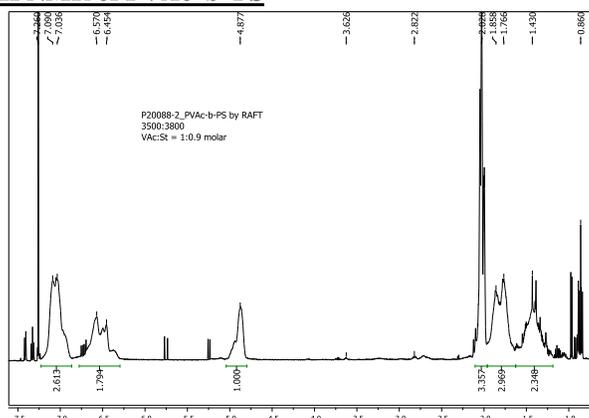
Solubility:

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

H NMR of PVAc

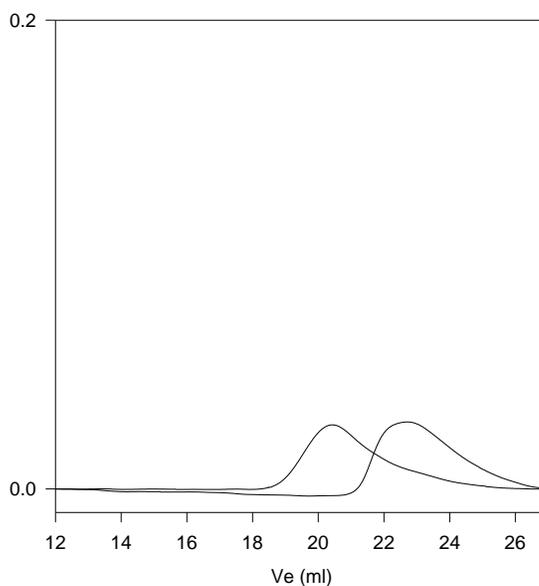


H NMR of PVAc–b–PS



SEC of the block copolymer:

P20088-VAc-S



Size exclusion chromatography result:

— VAc–b–S M_n = 3,500–b–3,800 PI = 2.8