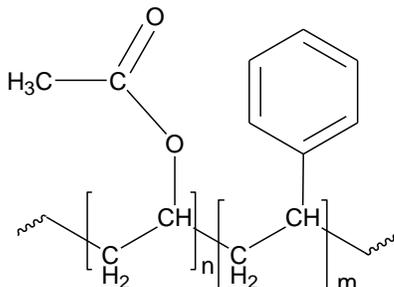


Sample Name: Poly(vinyl acetate–b–styrene)

Sample #: P20082-4-VAcS

Structure:

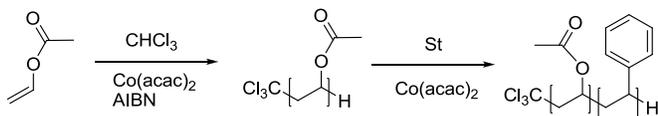


Composition:

$M_n \times 10^3$ VAc–b–St	PDI
30.0-b-55.0	2.8
VAc:St = 1:1.5 (NMR)	

Synthesis Procedure:

The product was obtained by successive telomerization of vinyl acetate and styrene using CHCl_3 as telomer, Co(II) acetylacetonate as chain transfer agent and AIBN as a radical initiator, as presented in the Scheme below:



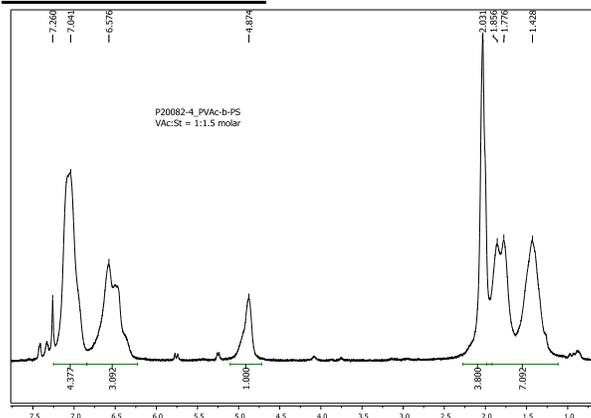
Characterization:

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

Solubility:

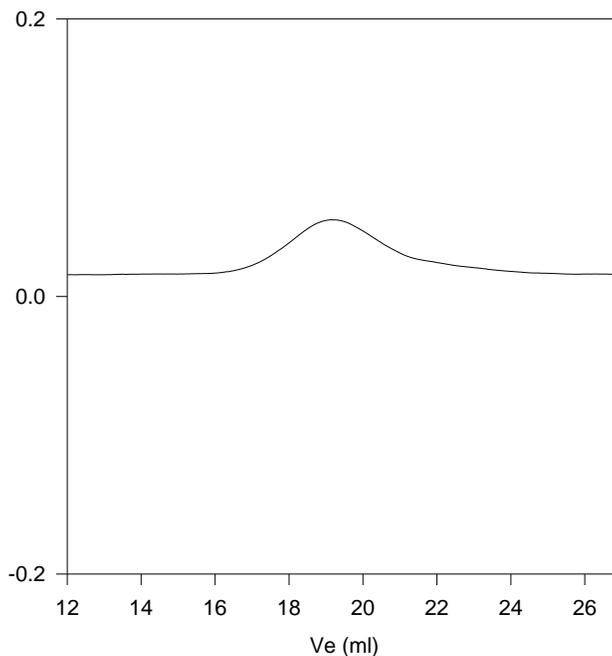
The polymer is soluble in THF, Acetone, CHCl_3 and precipitates from MeOH and Hexane.

H NMR of PVAc–b–PS



SEC of the block copolymer:

P20082-4 -VAc-S



Size exclusion chromatography result:

— VAc-b-S $M_n = 35,000$ -b- $55,000$ $PI = 2.8$