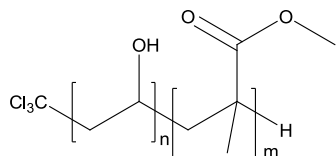


Sample Name:
Poly(vinyl alcohol-b-methyl methacrylate)

Sample #: P20080-VAMMA

Structure:

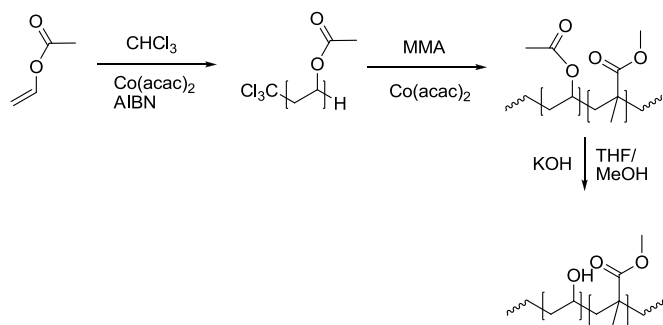


Composition:

$M_n \times 10^3$ VA-b-MMA	PDI
2.3–25.0	1.7
VA:MMA = 1:4.8 (NMR)	

Synthesis Procedure:

The product was obtained by successive telomerization of vinyl acetate and methyl methacrylate using CHCl_3 as telomer, $\text{Co}(\text{II})$ acetylacetonate as chain transfer agent and AIBN as a radical initiator, followed by hydrolysis of acetate moiety, as presented in the Scheme below:



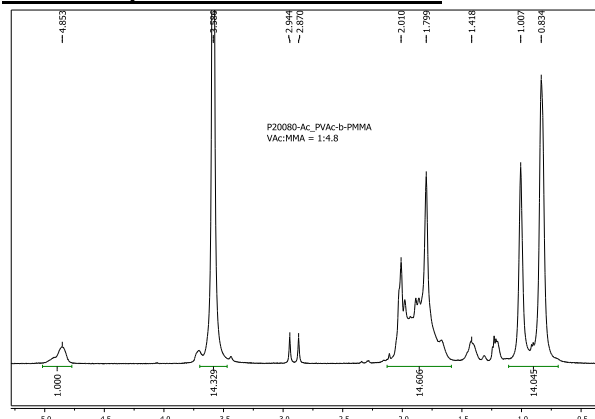
Characterization:

NMR was used to confirm structure. M_n of PVAc-b-PMMA was estimated from NMR using SEC M_n of PVAc as a reference, and PDI was estimated from SEC.

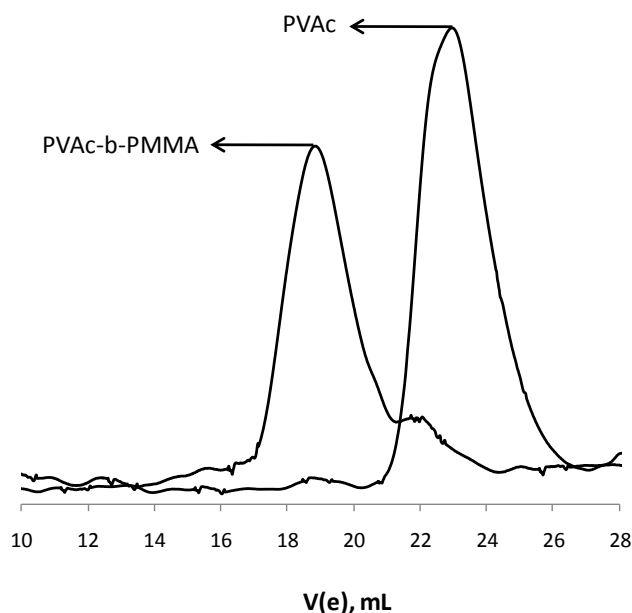
Solubility:

PVA-b-PMMA is soluble in DMSO.

H NMR of precursor PVAc-b-PMMA



SEC of the precursor diblock copolymer VAc-b-MMA:



PVAc, $M_w / M_n = 1.7$, **PVAc-b-PMMA**, $M_w / M_n = 1.7$