

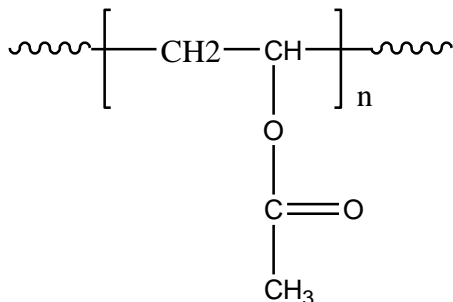
Sample Name: Poly(Vinyl Acetate)

SEC of Homopolymer:

Sample #: P18693A-VAC

P18693A-VAc

Structure:

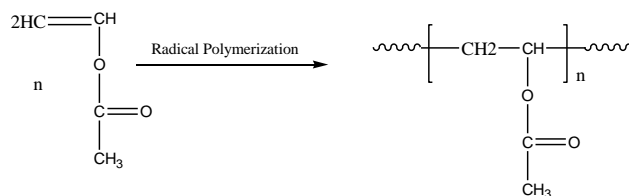


Composition:

Mn x 10 ³	PDI
85.0	3.5

Synthesis Procedure:

Poly vinyl acetate is obtained by free radical polymerization using iodo ethyl acetate as chain transfer reagent or by heterogeneous polymerization in water using potassium persulfate as initiator.. Polymerization was carried out in bulk. The polymerization scheme can be illustrated as follows:

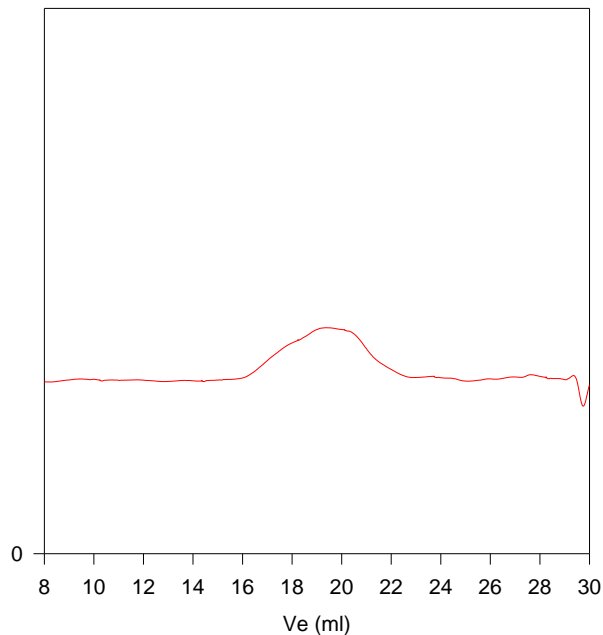


Characterization:

The molecular weight and polydispersity index (PDI) are obtained by size exclusion chromatography (SEC) in THF. SEC analysis was performed on a Varian liquid chromatograph equipped with refractive and UV light scattering detectors. Three SEC columns from Supelco (G6000-4000-2000 HXL) were used with triple detectors from Viscotek Co. ¹H NMR analysis was carried out on Varian instrument at 500MHz.

Solubility:

Polymer is soluble in THF, CHCl₃, toluene and dioxane. The polymer precipitates from hexanes and ether.



Size exclusion chromatograph of Poly vinyl acetate:

M_n=85,000 M_w=298,000 PI=3.5