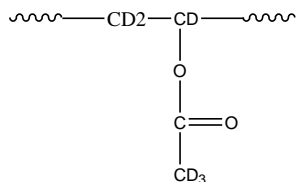


Sample Name:
Deuterated Poly(Vinyl Acetate)-d6

Sample #: **P44422-dPVAC**

Structure:

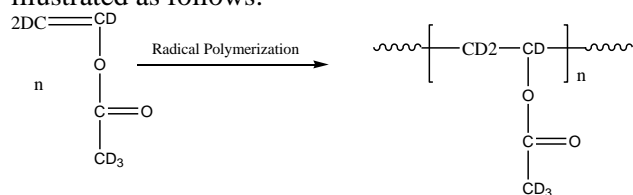


Composition:

| $M_n \times 10^3$ | PDI |
|-------------------|-----|
| 6.0 | 1.4 |

Synthesis Procedure:

Poly vinyl acetate is obtained by free radical polymerization using iodo ethyl acetate as chain transfer reagent. 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:

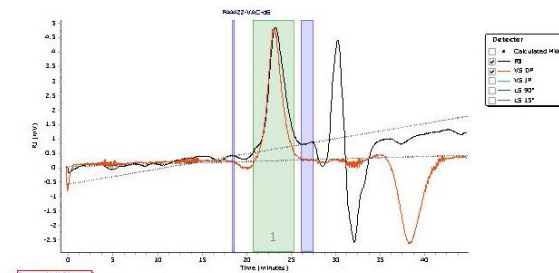
Polymer is soluble in THF, CHCl_3 , toluene and dioxane. The polymer precipitates from hexanes and ether.

SEC elugram of Homopolymer:

Agilent GPC/SEC Software

P44422-VAC-d6

Chromatogram Plot



Molecular Weight Averages

| Peak | Mp (g/mol) | Mn (g/mol) | Mw (g/mol) | Mz (g/mol) | Mz+1 (g/mol) | Mu (g/mol) | PDI |
|--------|------------|------------|------------|------------|--------------|------------|-------|
| Peak 1 | 78710 | 50710 | 82950 | 118550 | 159350 | 101480 | 1.413 |