

Product Profile

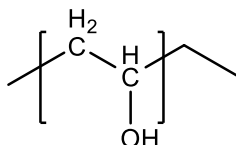
Identification

Product Name: Poly (Vinyl alcohol)

Product Lot Number: P44595C-VA

CAS# 9002-89-5

Product Chemical Architecture:



Composition:

Mn x 10 ³	Mw/Mn (PDI)	dn/dc in Water
2.5	1.17	0.15ml/g
Microstructure of Polymer by ¹ H NMR		

Method of Synthesis. Poly vinyl alcohol is obtained from the hydrolysis of poly vinyl acetate under alkaline conditions. Poly vinyl acetate is obtained by free radical polymerization. Polymerization was carried out in bulk.

Solubility in different solvents

THF	X	Water	✓
CHCl ₃	X		
Toluene	X		

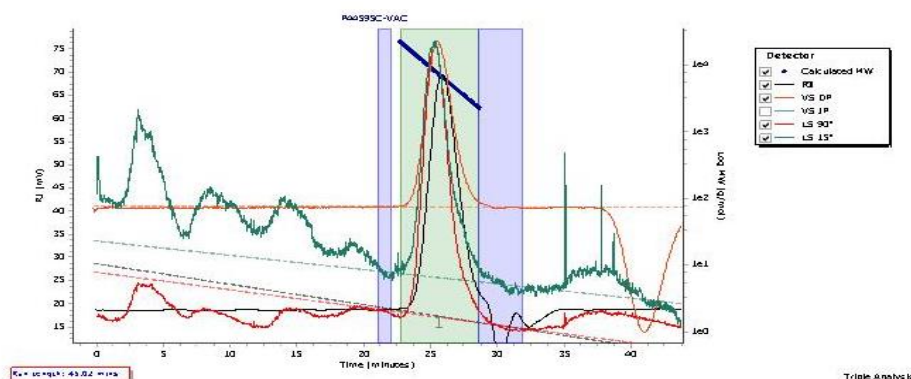
Purification of Polymer: By column chromatography

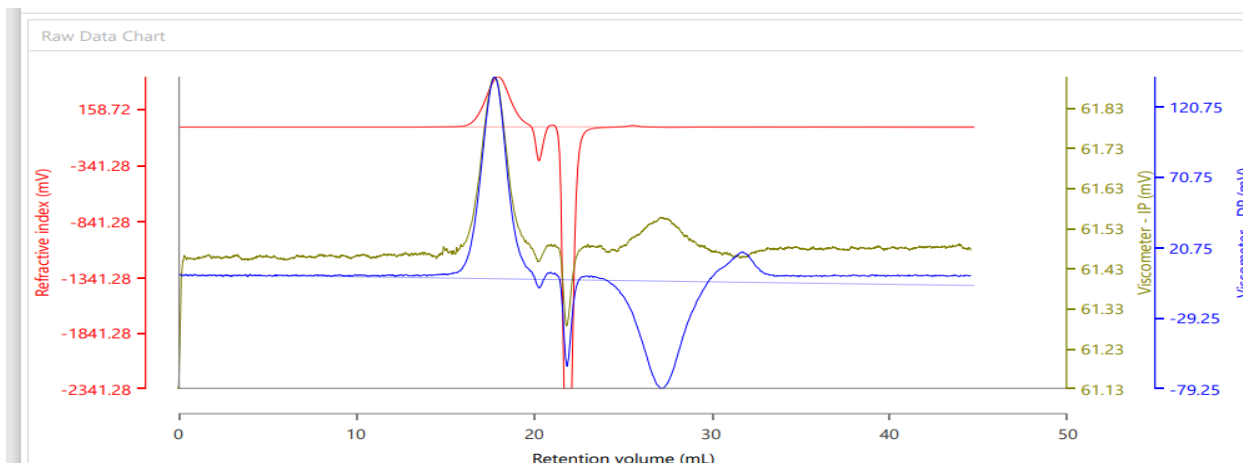
Validation of Architecture: GPC carried out in aqueous conditions with H₂O containing 0.25M NaNO₃ and 0.01M NaH₂PO₄ buffer pH 7 at room temperature using 2 columns and flow rate 1.0ml/min.

A. Gel Permeation Chromatography (GPC), SEC- Profile:

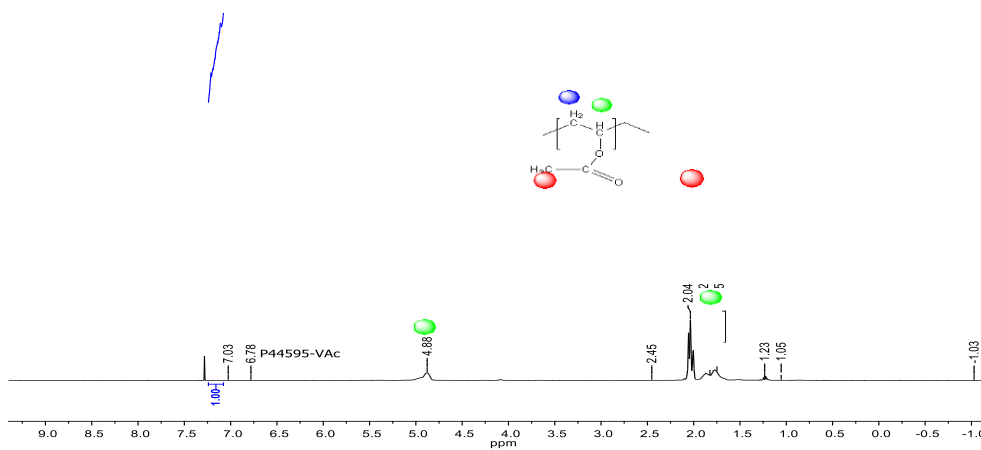
P44595C-VAC

Chromatogram Plot





B. NMR (HNMR) of polymer:
Poly Vinyl acetate in CdCl₃



Poly Vinyl alcohol in D₂O

