

# Product Profile

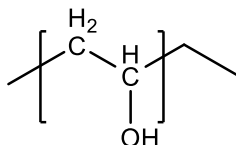
## Identification

**Product Name:** Poly (Vinyl alcohol)

**Product Lot Number:** P44595E-VA

**CAS#** 9002-89-5

**Product Chemical Architecture:**



## Composition:

Mn x 10 <sup>3</sup>	Mw/Mn (PDI)	dn/dc in Water
2.8	1.13	0.15ml/g
Microstructure of Polymer by <sup>1</sup> 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.

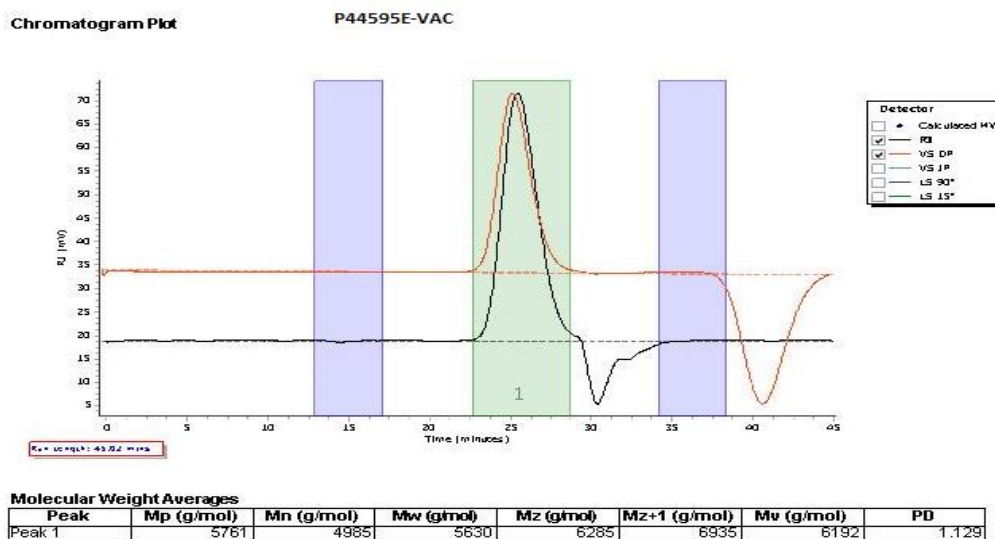
## Solubility in different solvents

THF	X	Water	✓
CHCl <sub>3</sub>	X		
Toluene	X		

**Purification of Polymer:** By column chromatography

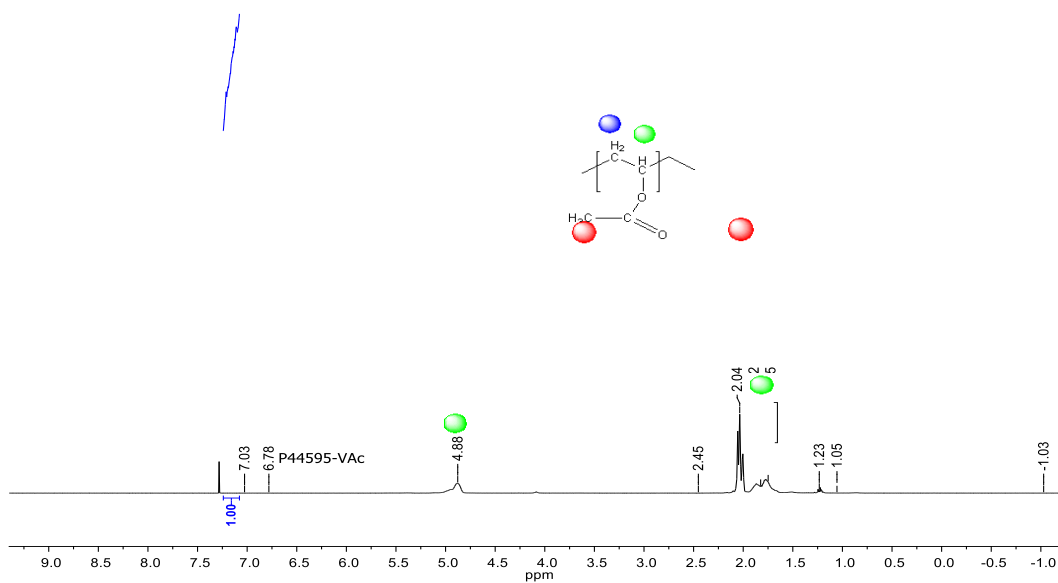
**Validation of Architecture:** GPC carried out in aqueous conditions with H<sub>2</sub>O containing 0.25M NaNO<sub>3</sub> and 0.01M NaH<sub>2</sub>PO<sub>4</sub> buffer pH 7 at room temperature using 2 columns and flow rate 1.0ml/min.

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



## B. NMR (HNMR) of polymer:

### Poly Vinyl acetate in CdCl3



### Poly Vinyl alcohol in

