

Product Profile

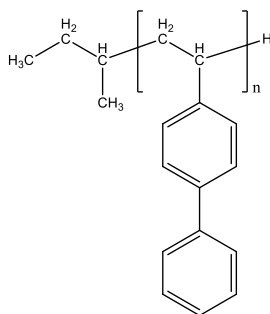
Identification

Product Name: POLY(4-VINYL BIPHENYL)

Product Lot Number: P19864-R-4VBP

CAS: 25232-08-0

Product Chemical Architecture:



Composition:

$M_n \times 10^3$	M_w/M_n (PDI)	dn/dc (mg/mL) in THF
269.0	1.10	0.184

Method of Synthesis

By anionic process.

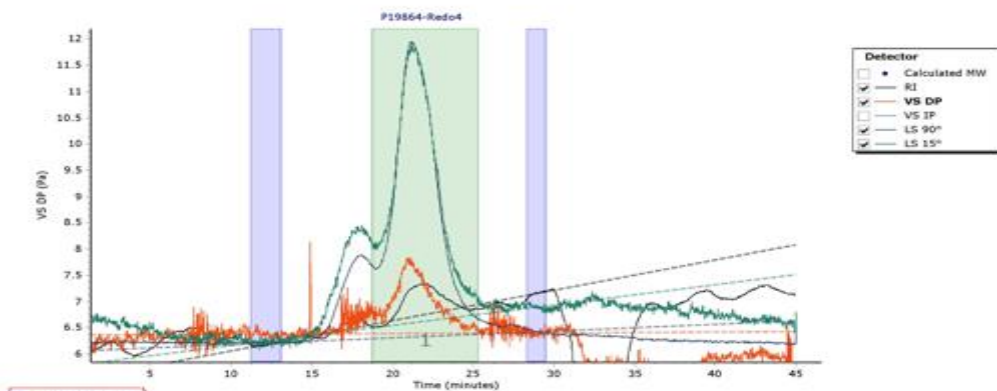
Solubility in different solvents

THF	✓		
CHCl ₃	✓	CHCl ₃	✓
Toluene	✓		

Validation of Architecture:

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

Chromatogram Plot

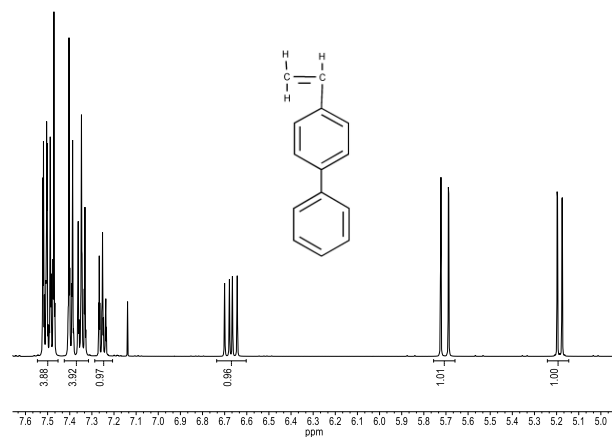


Molecular Weight Averages

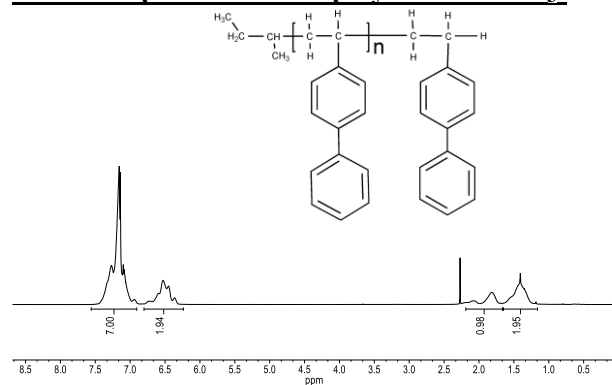
Peak	M_p (g/mol)	M_n (g/mol)	M_w (g/mol)	M_z (g/mol)	M_{z+1} (g/mol)	M_v (g/mol)	PD
Peak 1	297024	268610	294492	320123	344117	321548	1.096

B. ^1H NMR spectrum of the monomer in CDCl_3 :

^1H NMR spectrum of the monomer in CDCl_3 :



^1H NMR spectrum of the polymer in CDCl_3 :



C. Thermal analysis profile of polymers

DSC data for poly 4VBP polymers of different molecular weights

Molecular weight (M_n)	Glass transition (T_g)
9.5×10^3	105 °C
30.0×10^3	135 °C
75.5×10^3	141 °C
530.0×10^3	151 °C