

Product Profile

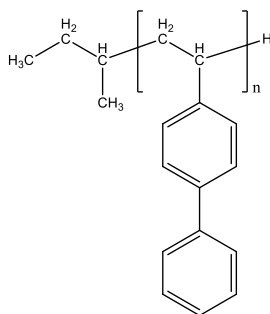
Identification

Product Name: POLY(4-VINYL BIPHENYL)

Product Lot Number: P19850-R-4VBP

CAS: 25232-08-0

Product Chemical Architecture:



Composition:

$\text{Mn} \times 10^3$	Mw/Mn (PDI)	$\text{dn/dc (mg/mL) in THF}$
37.0	1.27	0.184

Method of Synthesis By anionic process.

Solubility in different solvents

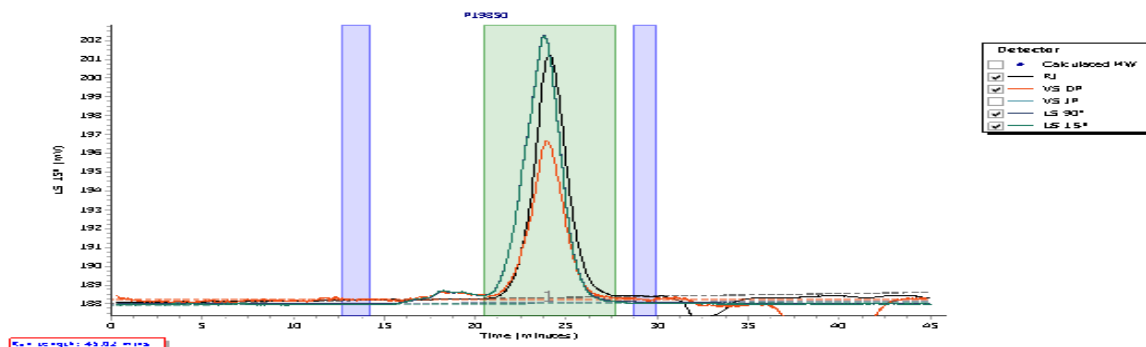
THF	✓		
CHCl_3	✓	CHCl_3	✓
Toluene	✓		

Validation of Architecture:

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

P19850

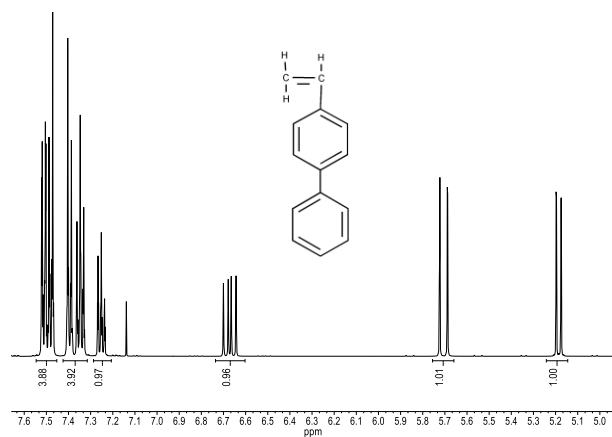
Chromatogram Plot



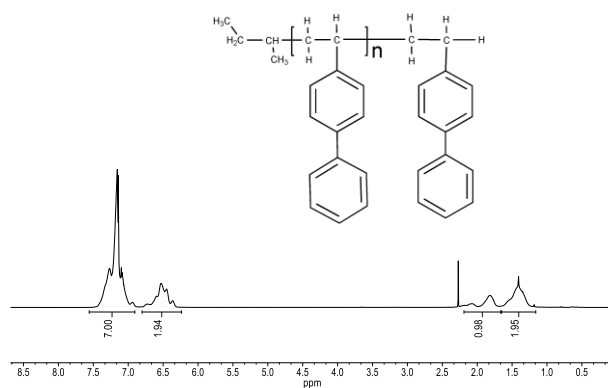
Molecular Weight Averages

Peak	Mp (g/mol)	Mn (g/mol)	Mw (g/mol)	Mz (g/mol)	Mz+1 (g/mol)	Mv (g/mol)	PD
Peak 1	43595	37203	47139	59234	74247	55997	1.267

^1H NMR spectrum of the monomer in CDCl_3 :



INMR (HNMR) of polymer:



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