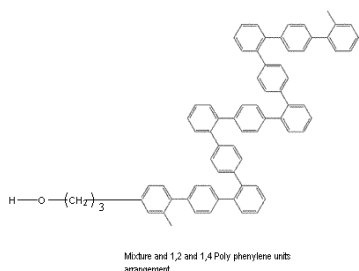


Sample Name:

Hydroxy terminated Poly(1-4 and 1,2 phenylene)

Sample #: **P9458-PP-OH**

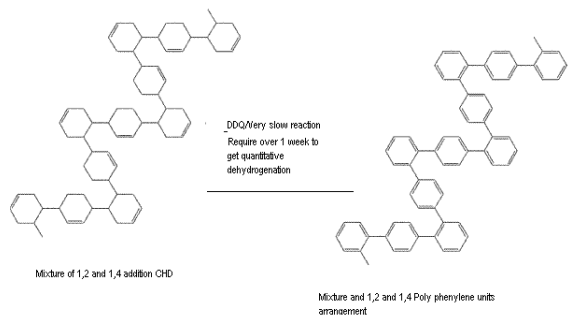


Structure:

Composition:

Mn x 10 ³	PDI
4.5	1.19

Synthesis Procedure: Hydroxy terminated Poly cyclohexadiene with 1,4 and 1,2 addition obtained by anionic polymerization in cyclohexane using tert.butyl dimethyl sioxy propyl lithium initiator followed by dehydrogenation of cyclohexadiene moieties using DDQ as catalyst. Dehydrogenation carried out for 1 weeks at 90 oC to ensure the complete dehydrogenation of ring.



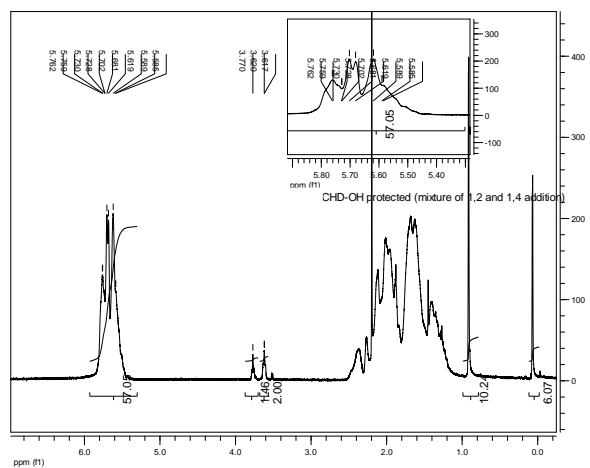
Characterization:

The molecular weight and polydispersity index (PDI) are obtained by size exclusion chromatography. Polymer characterized by HNMR

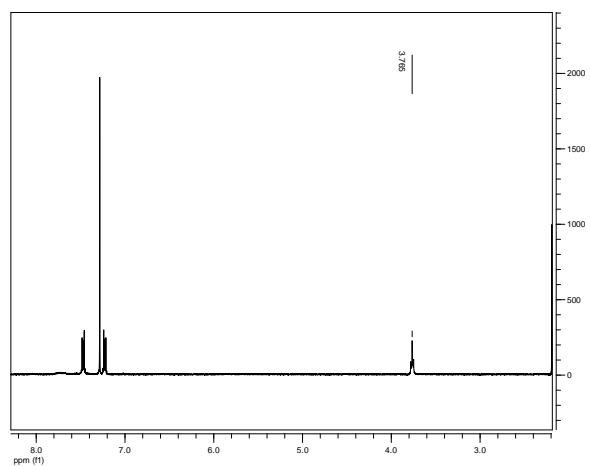
Solubility:

Polymer is partially soluble in THF obtained a solution that is not clear but light brown color.

HNMR of the PCHD-OH:

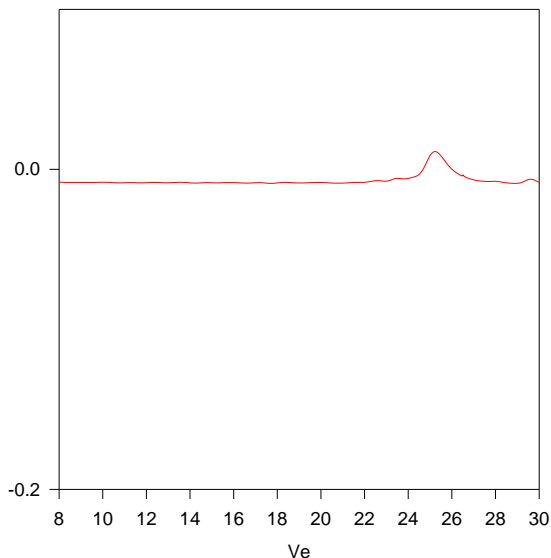


HNMR of the product after saturation of double bond:



SEC of Homopolymer:

P9458- CHD-OH



Size Exclusion Chromatography profile of the product:
OH terminated Poly cyclohexadiene with 1,2 and 1,4 addition
M_n = 4500, M_w = 5400, PI=1.19