

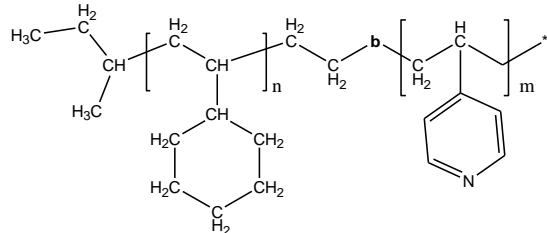
Sample Name:

Poly Vinyl Cyclohexane-b-4Vinylpyridine

Synonym: Poly Cyclohexyl ethylene-b-4Vinylpyridine

Sample #: **P40427D-VCH4VP**

Structure:



Composition:

Mn x 10 ³	PDI
5.5-b-70.0	1.4
T _g (°C)	113 and 133

Synthesis Procedure:

The polymer was synthesized by combination of anionic polymerization and RAFT process.

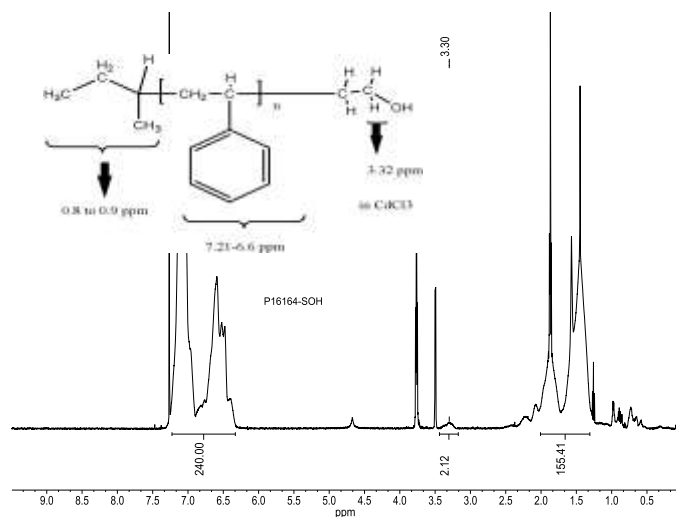
Characterization:

The product was characterized by ¹H NMR.

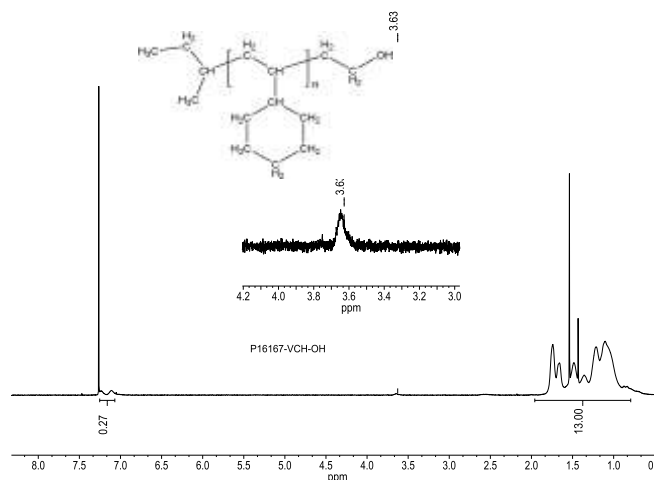
Solubility:

Polymer is soluble in toluene (not clear solution), THF, CHCl₃ and is not soluble in Methanol, and DMF.

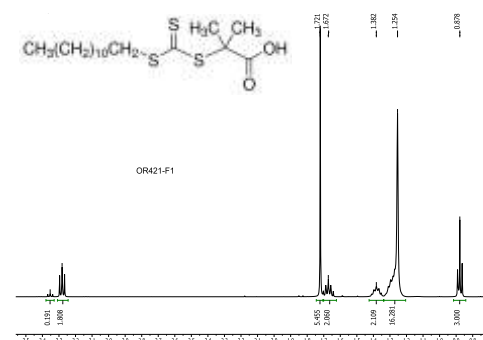
¹H NMR spectrum of the S-OH:



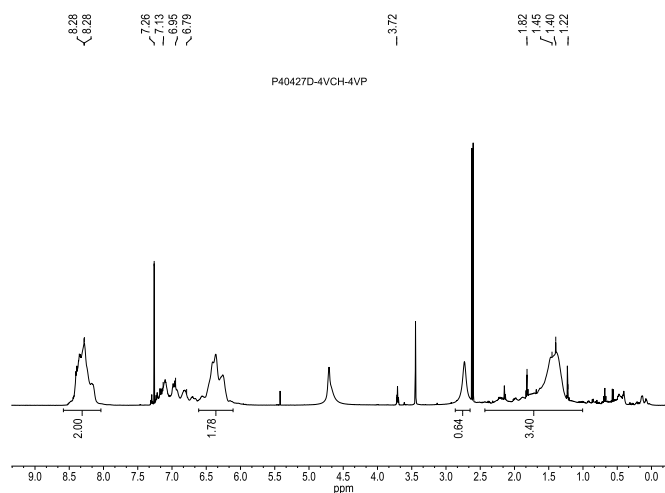
¹H NMR of Polymer PVCH-OH:



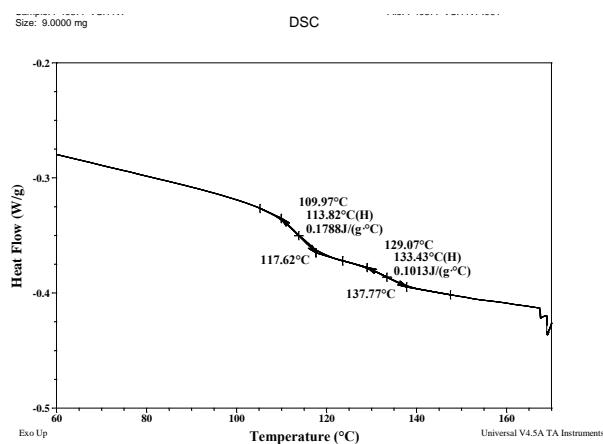
¹H NMR spectrum of the PVCH-RAFT



¹H NMR spectrum of the PVCH-4VP:



DSC thermogram for the sample:



Reference:

Synthesis and thermal properties of poly(vinylcyclohexane)-b-poly(4-vinylpyridine) diblock copolymers prepared via RAFT polymerization

Yinghua Qi, Iryna I. Perepichka, Zhengji Song and Sunil K. Varshney

Published Online: e-Polymer 2017-08-

19 | DOI: <https://doi.org/10.1515/epoly-2017-0102>