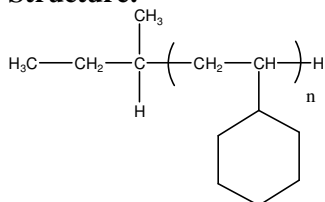


Sample Name: Poly Vinyl Cyclohexane

Sample #: P19982-VCH

Structure:



Composition:

$M_n \times 10^3$	PDI
79.0	1.04
Tg 126.5°C	

Synthesis Procedure:

Polystyrene is obtained by living anionic polymerization. Polystyrene was hydrogenated in the presence of Pd based catalyst with Hydrogen pressure of 1200 psi at 140 oC. The Hydrogenation was carried out for three days. Polymer was recovered after removing catalyst by passing through Silica column and precipitation in ethanol. Polymer was finally dried at 100 oC for 24h under vacuum.

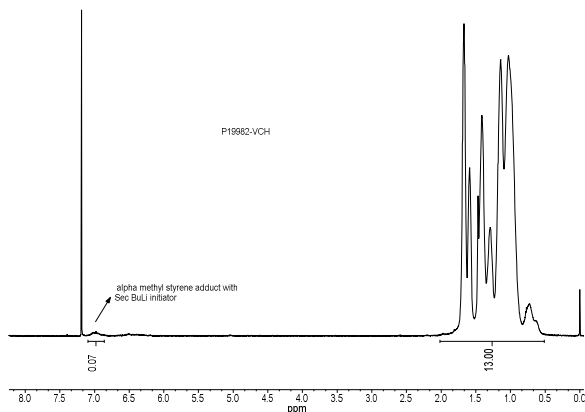
Characterization:

The polymer was characterized by SEC, ¹H NMR, DSC.

Solubility:

Polymer is soluble in THF, toluene and CHCl₃. It precipitates from methanol, ethanol, water and hexanes.

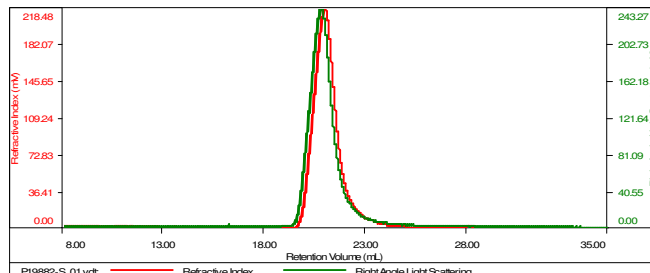
¹H NMR spectrum of Homopolymer:



SEC elugram of Homopolymer

Sample ID: P19982-S

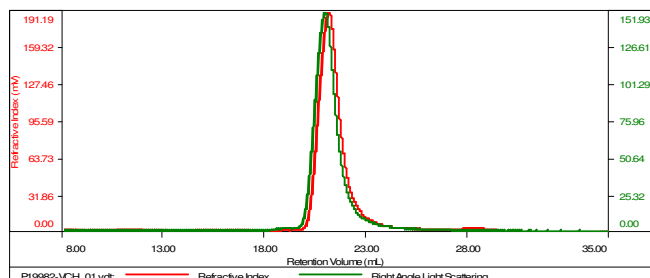
Concentration (mg/mL)	4.9095
Sample ch/dc (mL/g)	0.1850
Method File	PS80K-30JUNE2016-0000.vcm
Column Set	3x PL 1113-6300
Solvent	THF



Sample	Mh (Da)	Mw (Da)	Mw/Mh	IV (dL/g)	Mp (Da)
P19982-S_01.vdt	75,257	77,705	1.033	0.5330	74,016

Sample ID: P19982-VCH

Concentration (mg/mL)	6.2792
Sample ch/dc (mL/g)	0.1230
Method File	PS80K-30JUNE2016-0000.vcm
Column Set	3x PL 1113-6300
Solvent	THF



Sample	Mh (Da)	Mw (Da)	Mw/Mh	IV (dL/g)	Mp (Da)
P19982-VCH_01.vdt	79,130	82,465	1.042	0.3109	80,011

DSC thermogram of Homopolymer

