

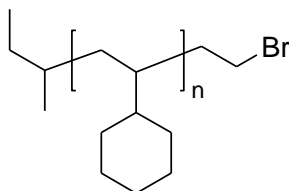
Sample Name: : ω -Bromo-terminated Poly (vinyl cyclohexane)

Synonym:

ω -Bromo-terminated Poly (cyclohexyl ethylene)

Sample #: P16156-VCHBr

Structure:



Composition:

Mn x 10 ³	PDI
12.5	1.05

Synthesis Procedure:

ω -Bromo terminated poly(cyclohexyl ethylene) was prepared by hydrogenation of OH terminated polystyrene and then converting OH terminal group to bromo group by bromination with thionyl bromide.

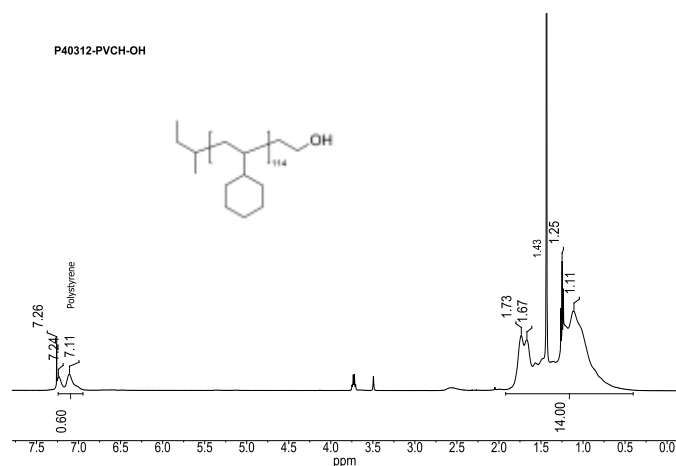
Characterization:

The product was characterized by size exclusion chromatography (SEC) and ¹H NMR.

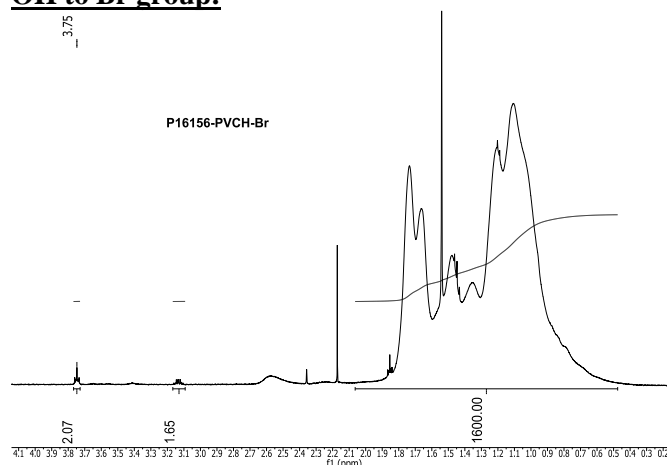
Solubility:

Polymer is soluble in toluene, THF, CHCl₃ and can be precipitated in water and cold methanol.

¹H NMR spectrum of the PVCH-OH (P40312, hydrogenation rate > 95%):



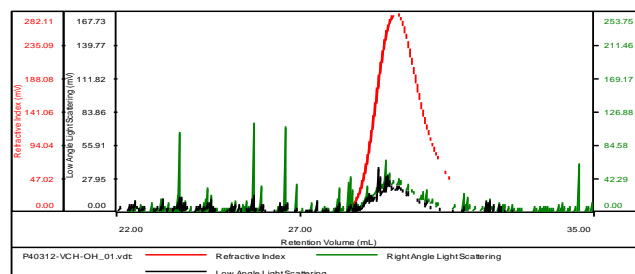
¹H NMR spectrum of the PVCH-Br after converting OH to Br group:



SEC elugram of PVCH-OH:

P40312-VCH-OH

Concentration (mg/mL)	8.5194
Sample dn/dc (mL/g)	0.1300
Method File	PS80K-Nov2016-6-0000.vcm
Column Set	3x PL 1113-6300
Solvent	THF



Sample	Mn (Da)	Mw (Da)	Mw/Mn	IV (dL/g)	Mp (Da)
P40312-VCH-OH_01.vi	12,304	12,934	1.051	0.1575	12,815