

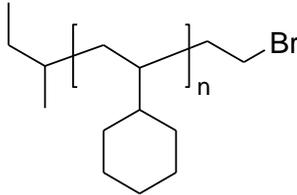
Sample Name: ω -Bromo-terminated Poly (vinyl cyclohexane)

Synonym:

ω -Bromo-terminated Poly (cyclohexyl ethylene)

Sample #: P16152-VCHBr

Structure:



Composition:

$M_n \times 10^3$	PDI
17.5	1.04

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.

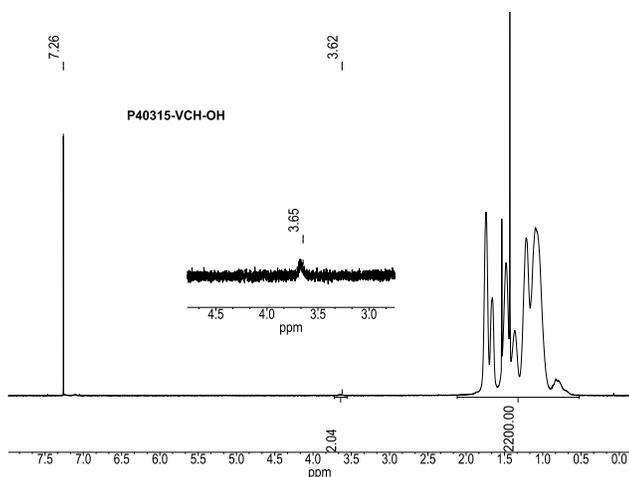
Characterization:

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

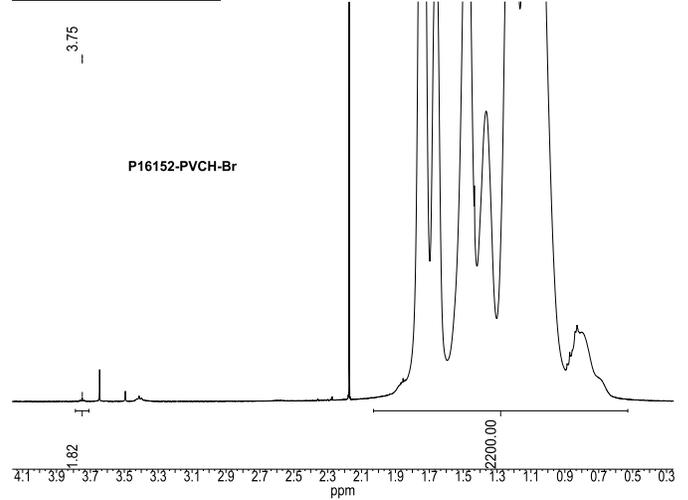
Solubility:

Polymer is soluble in toluene, THF, $CHCl_3$ and can be precipitated in water and cold methanol.

1H NMR spectrum of the PVCH-OH (P40315, hydrogenation rate > 99%):



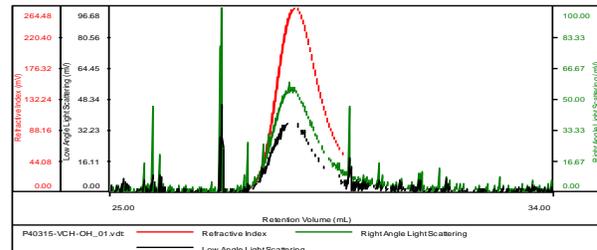
1H NMR spectrum of the PVCH-Br after converting OH to Br group:



SEC elugram of PVCH-OH:

P40315-VCHOH

Concentration (mg/mL)	5.0435
Sample dn/dc (mL/g)	0.1550
Method File	PS80K-Nov2016-6-0000.vcm
Column Set	3x PL 1113-6300
Solvent	THF



Sample	M_n (Da)	M_w (Da)	M_w/M_n	IV (dL/g)	M_p (Da)
P40315-VCH-OH_01.vt	17,536	18,284	1.043	0.1670	17,081