

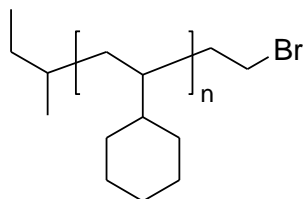
**Sample Name:**  $\omega$ -Bromo-terminated Poly (vinyl cyclohexane)

**Synonym:**

$\omega$ -Bromo-terminated Poly (cyclohexyl ethylene)

**Sample #:** P16152-VCHBr

**Structure:**



**Composition:**

Mn x 10 <sup>3</sup>	PDI
17.5	1.04

**Synthesis Procedure:**

$\omega$ -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.

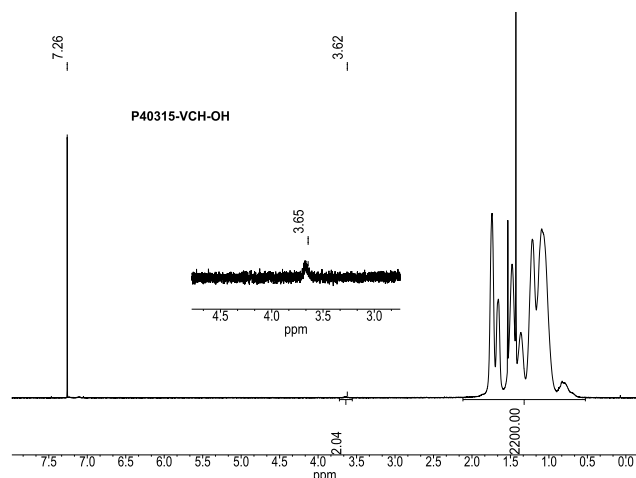
**Characterization:**

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

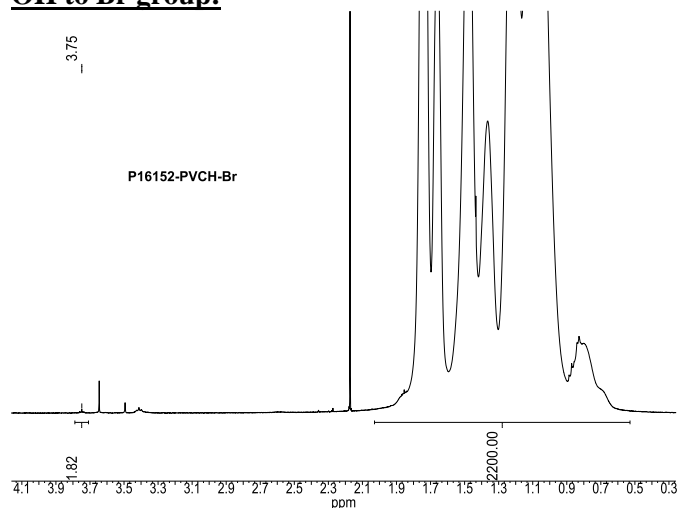
**Solubility:**

Polymer is soluble in toluene, THF, CHCl<sub>3</sub> and can be precipitated in water and cold methanol.

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



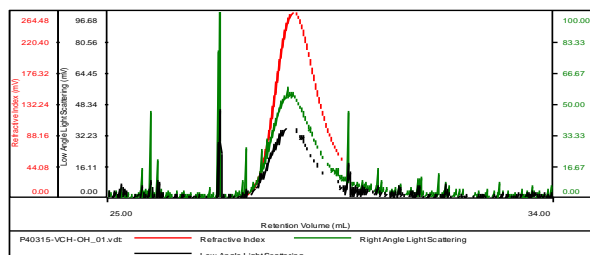
**<sup>1</sup>H NMR spectrum of the PVCH-Br after converting OH to Br group:**



**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	Mn (Da)	Mw (Da)	Mw/Mn	IV (dL/g)	Mp (Da)
P40315-VCH-OH_01.vt	17,536	18,284	1.043	0.1670	17,081