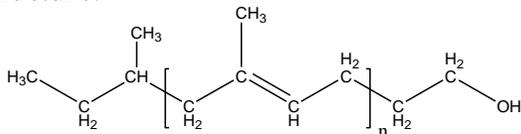


Sample Name:
Poly(1,4-isoprene), ω -hydroxy-terminated

Sample #: P44208F1-IPOH

Structure:



Composition:

$M_n \times 10^3$	PDI
13.0	1.06

OH functionality >95%

Synthesis Procedure:

1, 4-addition hydroxy terminated polyisoprene was prepared by anionic living polymerization in a non-polar solvent using sec.BuLi initiator followed by termination with ethylene oxide.

Characterization:

The molecular weight and polydispersity index (PDI) are obtained by size exclusion chromatography (SEC) in THF. SEC analysis was performed on a Varian liquid chromatograph equipped with refractive and UV light scattering detectors. Three SEC columns from Supelco (G6000-4000-2000 HXL) were used with triple detectors from Viscotek Co.

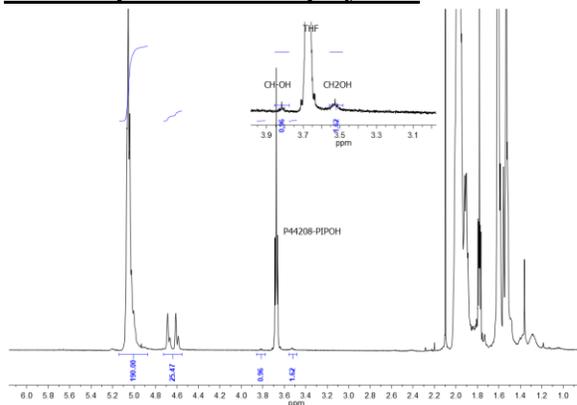
Functionality:

Functionality of the obtained polymer was determined by reacting polymer in dried non quantity of acetic anhydride in the presence of pyridine as a catalyst and the liberated COOH was titrated by acid-base titration.

Solubility:

Hydroxy terminated polyisoprene is soluble in DMF, THF, toluene, hexane, cyclohexane and $CHCl_3$. It precipitates from methanol, ethanol, and water.

HNMR spectrum of the polymer:



SEC elugram of the Sample:

