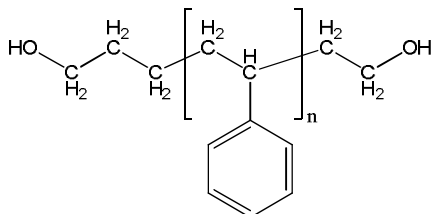
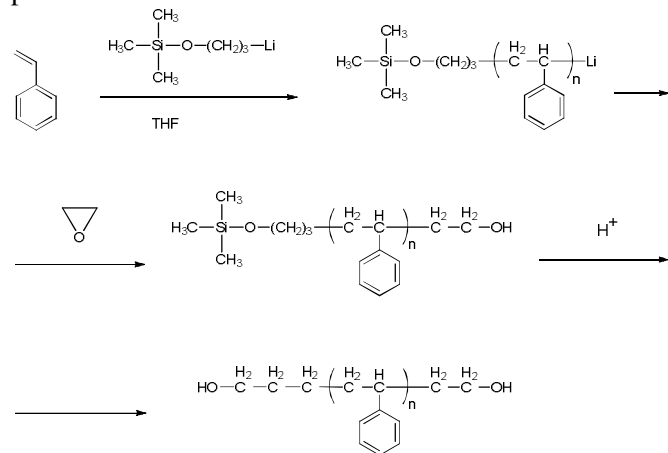


Sample Name: **α,ω -Di(hydroxy)-terminated polystyrene****Sample # P18085-S2OH****Structure:****Composition:**

$M_n \times 10^3$ (g/mol)	M_w/M_n
1,697.0	1.2

Synthesis procedure:

α,ω -Di(hydroxy)-terminated polystyrene was prepared by living anionic polymerization of styrene using a hydroxyl-protected initiator, followed by termination with ethylene oxide. The scheme of reaction is presented below:

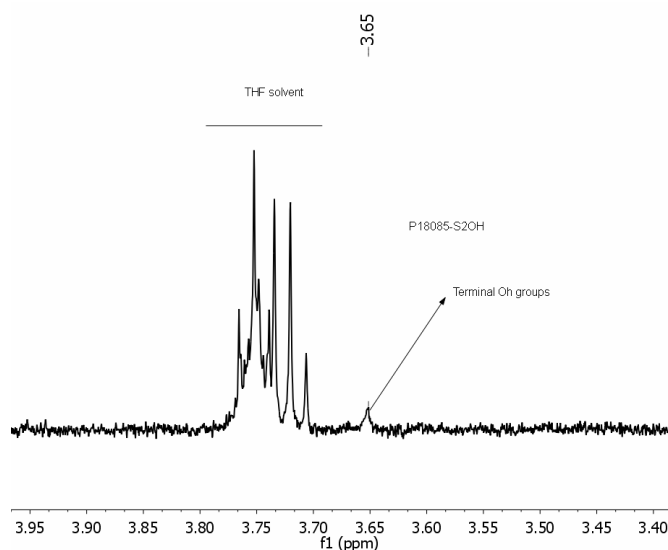
**Characterization:**

End-group functionality of the polymer was confirmed by ^1H -NMR spectroscopy.

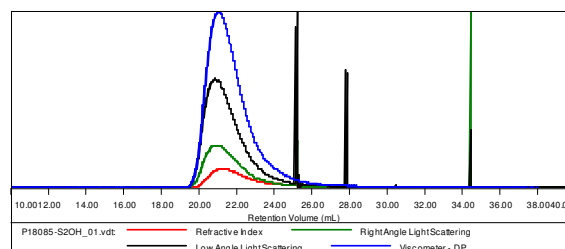
The molecular weight and polydispersity index of the polymer were determined by size exclusion chromatography (SEC) using a Varian liquid chromatograph equipped with a UV and refractive index detectors.

Solubility:

Polystyrene is soluble in toluene, THF, chloroform; and it precipitates from cold methanol, water.

 ^1H NMR (500 MHz, CDCl_3):**SEC elugram of the polymer:****Sample ID: P18085-S2OH**

Concentration (mg/mL)	1.5703
Sample dn/dc (mL/g)	0.1850
Method File	PS80K-July-2013-0000.vcm
Column Set	3x PL 1113-6300
System	System 1



Sample	M_n	M_w	M_p	M_w/M_n	IV
P18085-S2OH_01.vdt	1.697 e 6	2.067 e 6	2.302 e 6	1.219	4.4412

