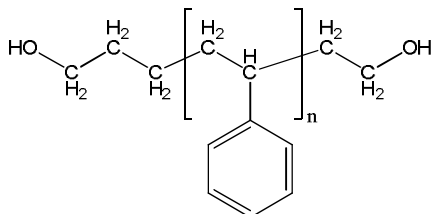
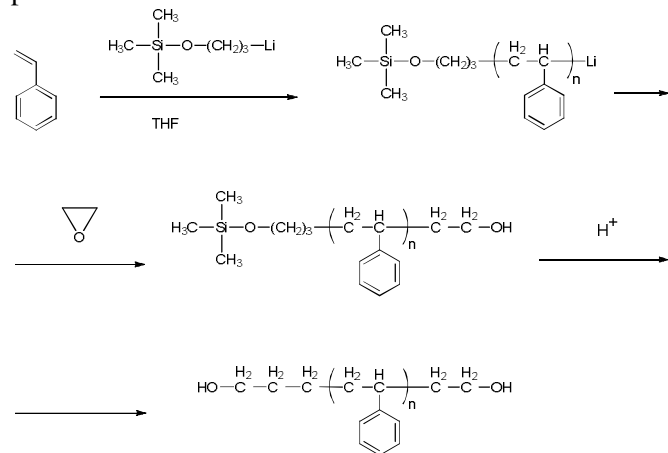


**Sample Name:** **$\alpha,\omega$ -Di(hydroxy)-terminated polystyrene****Sample # P18075-S2OH****Structure:****Composition:**

$M_n \times 10^3$ (g/mol)	$M_w/M_n$
990.0	1.15

**Synthesis procedure:**

$\alpha,\omega$ -Di(hydroxyl)-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  $^1\text{H}$ -NMR spectroscopy.

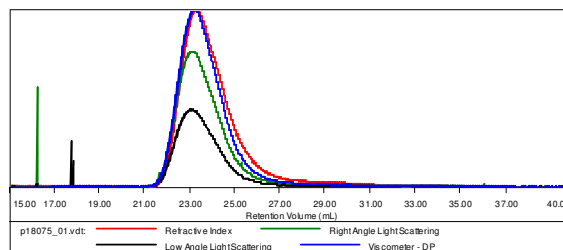
The molecular weight and polydispersity index of the polymer were determined by size exclusion chromatography (SEC) using a Varian liquid chromatograph equipped with a UV and refractive index detectors.

**Solubility:**

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

**SEC elugram of the polymer:****Sample ID:****P18075-S2OH**

Concentration (mg/mL)	1.4368
Sample dn/dc (mL/g)	0.1850
Method File	PS80K-May-2013-0000.vcm
Column Set	3x PL 1113-6300
System	System 1



Sample	$M_n$	$M_w$	$M_p$	$M_w/M_n$	IV
p18075_01.vdt	990,106	1.131 e 6	1.221 e 6	1.142	6.3204

