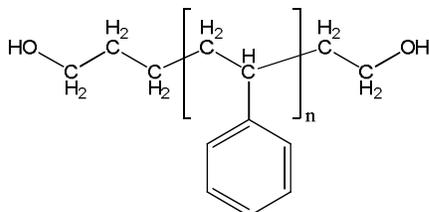
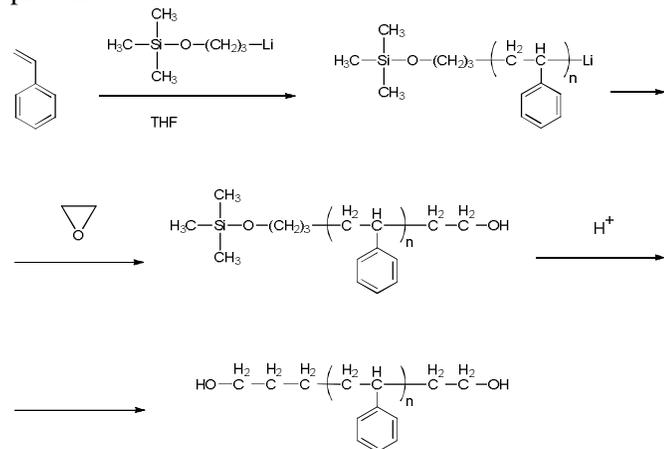


Sample Name: **α,ω -Di(hydroxy)-terminated polystyrene****Sample # P18108-S2OH****Structure:****Composition:**

$M_n \times 10^3$ (g/mol)	M_w/M_n
138.5	1.8

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 $^1\text{H-NMR}$ 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.

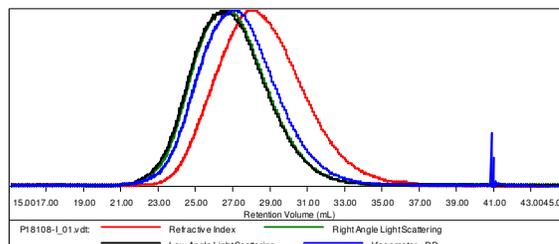
Solubility:

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

SEC elugram of the polymer:

Sample ID: P18108-I

Concentration (mg/mL)	8.3949
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
P18108-I_01.vdt	138,554	253,160	225,499	1.827	0.8954

