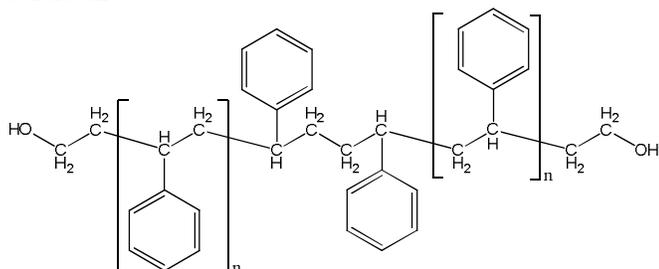


## Sample Name:

**$\alpha,\omega$ -Di(hydroxy)-terminated polystyrene,**  
(with styrene dimer group in the middle of polymer chain)

## Sample # P18072-S2OH

### Structure:

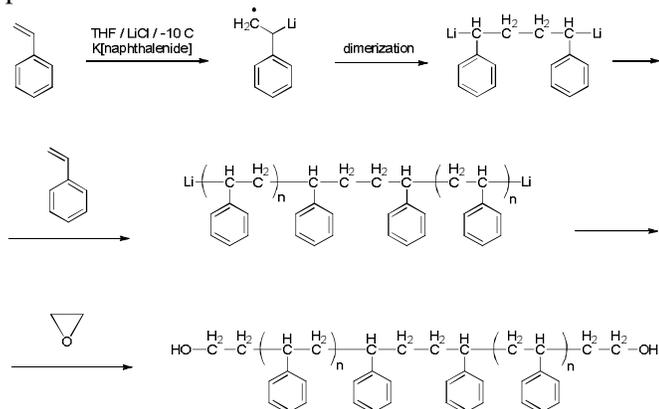


### Composition:

$M_n \times 10^3$ (g/mol)	$M_w/M_n$
1,900.0	1.15

### Synthesis procedure:

$\alpha,\omega$ -Di(hydroxy)-terminated polystyrene was prepared by living anionic polymerization of styrene using a bifunctional initiator in THF followed by termination with ethylene oxide. The scheme of reaction is presented below:



### Characterization:

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.

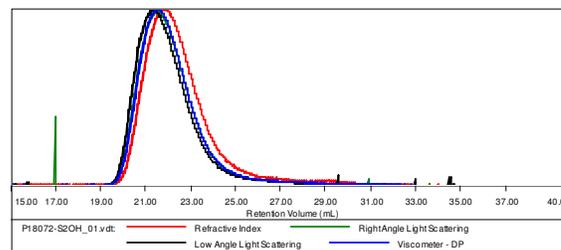
### Solubility:

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

### SEC elugram of the polymer:

Sample ID:  
P18072-S2OH

Concentration (mg/mL)	1.1559
Sample dn/dc (mL/g)	0.1850
Method File	PS80K-May-2013-0000.vc.m
Column Set	3x PL 1113-6300
System	System 1



Sample	Mn	Mw	Mp	Mw/Mn	IV
P18072-S2OH_01.vdt	1.910 e 6	2.203 e 6	2.199 e 6	1.153	10.2345

