

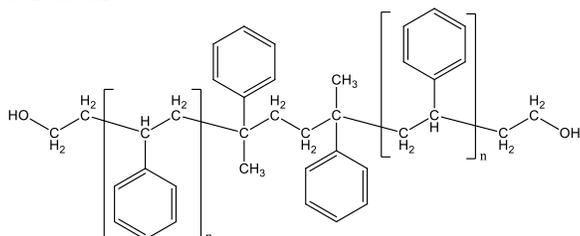
Sample Name:

α,ω -Di(hydroxy)-terminated polystyrene

(with α -methyl styrene dimer group in the middle of polymer chain)

Sample#: P5306B-S2OH

Structure:

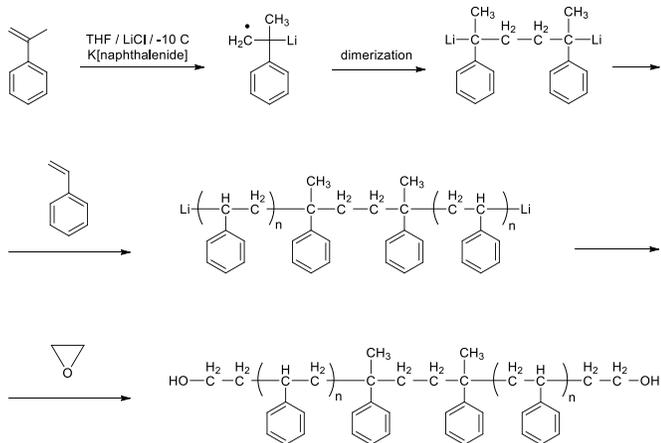


Composition:

$M_n \times 10^3$ (g/mol)	M_w/M_n
7.5	1.15

Synthesis procedure:

α,ω -Di(hydroxyl)-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:

