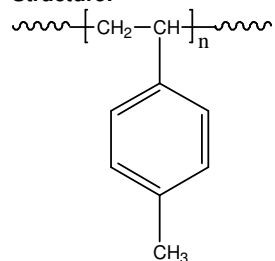


**Sample Name: Poly(4-methyl styrene)**

**Sample #: P1177-4MeS**

**Structure:**

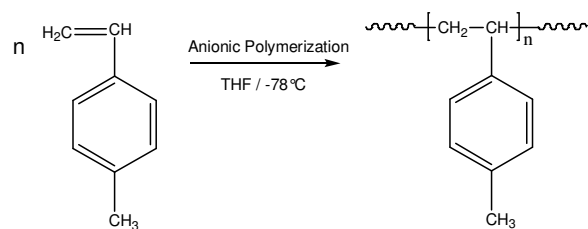


**Composition:**

Mn x 10 <sup>3</sup>	PDI
2.5	1.08

**Synthesis Procedure:**

Poly(4-methyl styrene) is synthesized by living anionic polymerization of 4-methyl styrene and the reaction scheme is shown below.



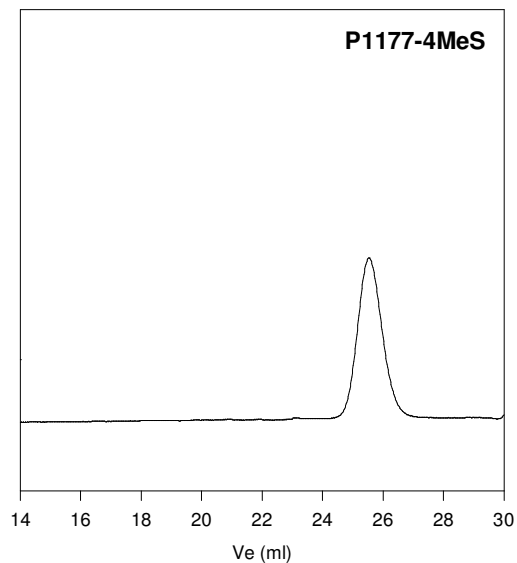
**Characterization:**

The molecular weight and polydispersity index (PDI) are obtained by size exclusion chromatography.

**Solubility:**

Poly(4-methyl styrene) is soluble in DMF, THF, toluene and CHCl<sub>3</sub>. It precipitates from methanol, ethanol, water and hexanes.

**SEC of Homopolymer:**



Size exclusion chromatograph of poly 4-methyl styrene:

$M_n=2500$ ,  $M_w=2700$ ,  $M_z=2900$ ,  $PI=1.08$