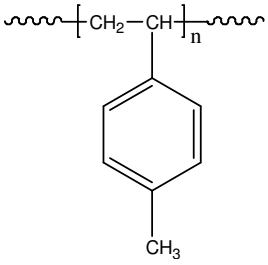
Sample Name: **Poly(4-methyl styrene)**

Sample #: **P19648-4MeS**

Structure:

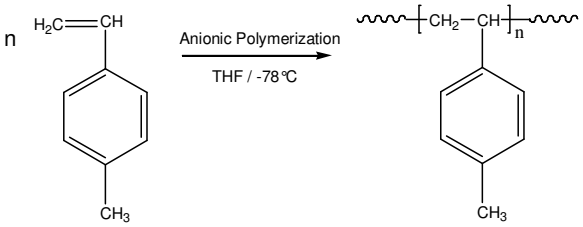


Composition:

Mn x 10^3	PDI
30.5	1.07

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 (SEC).

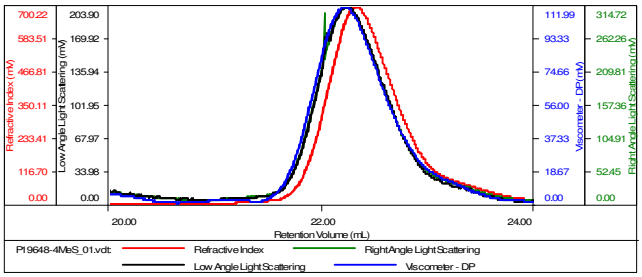
Solubility:

Poly(4-methyl styrene) is soluble in DMF, THF, toluene and $CHCl_3$. It precipitates from methanol, ethanol, water and hexanes.

SEC of Homopolymer:

Sample ID-P19648-4MeS

Concentration (mg/mL)	3.3476
Sample dn/dc (mL/g)	0.1850
Method File	PS80K-Jan-2016-0000.vcm
Column Set	3x PL 1113-6300
Solvent	THF



Sample	MW Number Average (Da)	MW Weight Average (Da)	MW at Peak (Da)	Polydispersity	Intrinsic Viscosity (dL/g)
P19648-4MeS_01.vdt	30,594	32,923	30,114	1.076	0.8170