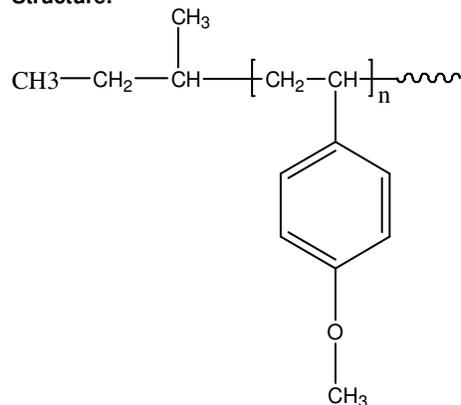


## Sample Name: Poly(4-methoxy styrene)

Sample #: P5515-4MeOS

Structure:



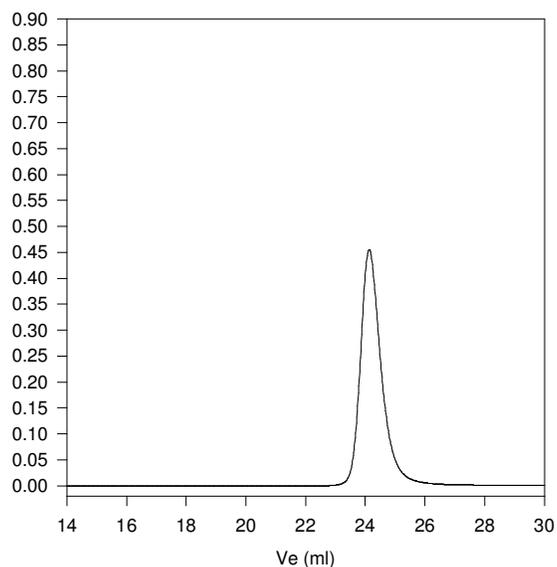
n: about 5

Composition:

$M_n \times 10^3$	PDI
18.0	1.08

SEC of Homopolymer:

P5515-4MeOS

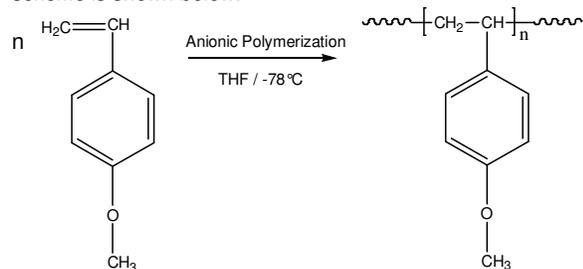


Size exclusion chromatography of poly(4-methoxy styrene):

$M_n=18,000$ ,  $M_w=19,500$ ,  $PI=1.08$

### Synthesis Procedure:

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



### Characterization:

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

### Solubility:

Poly(4-methoxy styrene) is soluble in DMF, THF, toluene and  $\text{CHCl}_3$ . It precipitates from methanol, ethanol, water and hexanes.