

**Sample Name:** Partially Deuterated (d1) Poly(4-methoxy styrene)

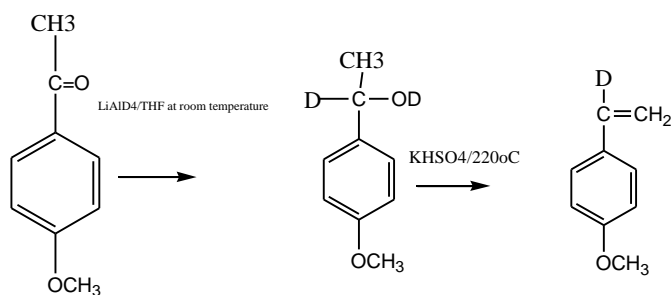
**Sample #:** P8121F2-d1P4MeOS

**Composition:**

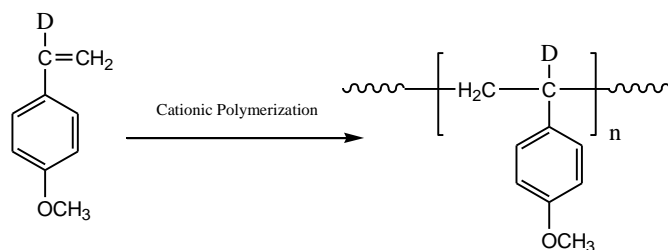
Mn x 10 <sup>3</sup>	PDI
29.0	1.3

**Synthesis Procedure:**

Deuterated monomer synthesis:



Cationic Polymerization in THF.



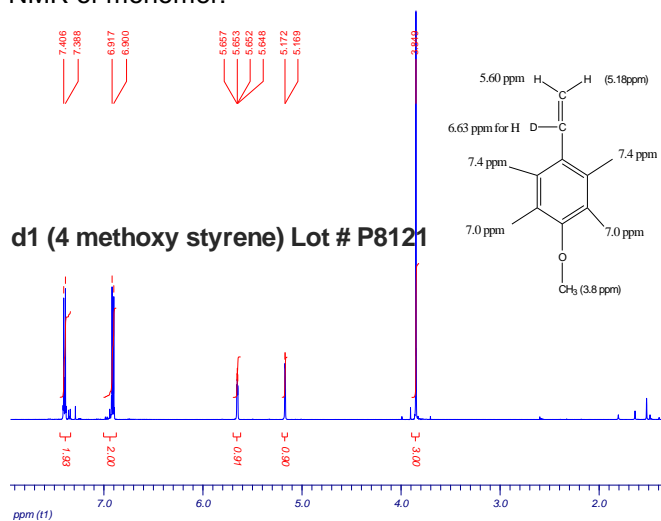
**Characterization:**

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

**Solubility:**

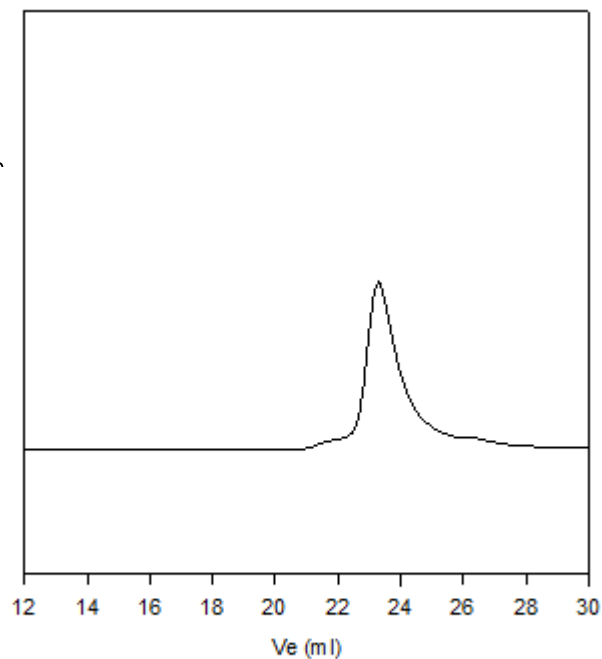
Deuterated polymer is soluble in THF, chloroform, and toluene. The polymer is insoluble in methanol and water.

NMR of monomer:



**SEC of Sample:**

P8121F2-d1P4MeOS



Size exclusion chromatography of  
Partially deuterated (d1) poly(4-methoxy styrene):  
 $M_n = 29000$ ,  $M_w = 37800$ ,  $PI = 1.3$