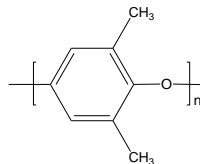


Sample Name:

Poly(2,6-dimethyl-p-phenylene oxide)

Sample #: **P2501-7-DMPO**

Structure:

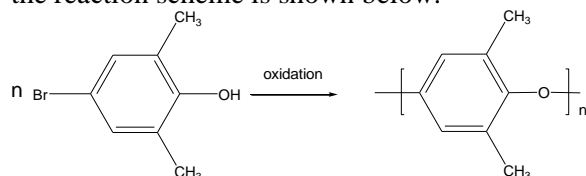


Composition:

Mn x 10 ³	PDI
13.0	1.27

Synthesis Procedure:

Poly(2,6-dimethyl-p-phenylene oxide) is obtained by oxidation polymerization and the reaction scheme is shown below.



Characterization:

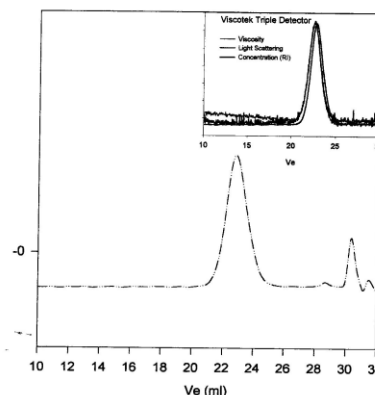
The molecular weight and polydispersity index (PDI) of poly(2,6-dimethyl-p-phenylene oxide) are obtained by size exclusion chromatography.

Solubility:

Polymer is soluble in DMF, THF (warm) and CHCl₃. It precipitates from methanol, ethanol, water, and hexanes.

SEC profile of Homopolymer:

P2501-7-DMPO



Size Exclusion Chromatography (SEC) of poly(2,6-dimethyl-1,4-phenylene ether):

— $M_w = 13000$, $M_w/M_n = 1.27$
(from Viscotek Triple detector) $[\eta] = 0.251$ (dL/g) (in THF at 30°C)
 $R_g = 5.20$ (nm)