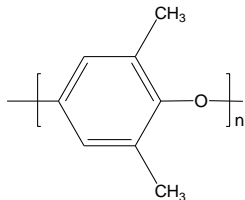


**Sample Name:** Poly(2,6-dimethyl-1,4-phenylene oxide)

**Sample #:** P5168-DMPO

**Structure:**

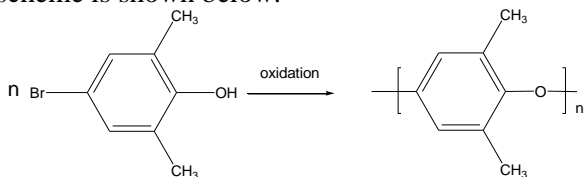


**Composition:**

Mn x 10 <sup>3</sup>	PDI
14.0	1.7

**Synthesis Procedure:**

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



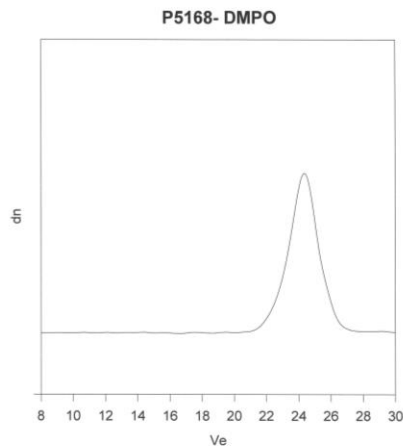
**Characterization:**

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

**Solubility:**

Solubility: Polymer is soluble in DMF, THF (warm) and CHCl<sub>3</sub>. It precipitates from methanol, ethanol, water, and hexanes.

**SEC of Homopolymer:**



Size Exclusion Chromatography of Poly(2,6-dimethyl-p-phenylene oxide) on line Viscotek triple detectors.

$M_n=14000$ ,  $M_w=24000$  PI=1.70  
Solution Viscosity in THF at 30 °C: 0.367 dl/g  
Radius of Gyration: 6.50 nm