

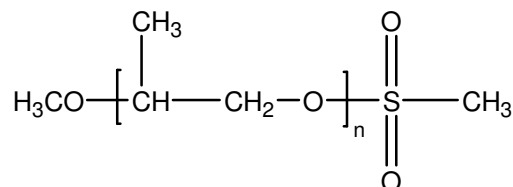
Sample Name:

**Mesylate-terminated oligo(propylene glycol)  
methyl ether**

or: **Tri(propylene glycol) methyl ether mesylate**

Sample #: **P5796-POOCH3Mesylate**

**Structure:**



**Composition:**

Mn x 10 <sup>3</sup> (g/mol)	PDI (M <sub>w</sub> /M <sub>n</sub> )
0.285	1.10

**Synthesis Procedure:**

Oligo(propylene glycol) methyl ether terminated with mesylate group was synthesized by anionic polymerization of propylene oxide.

**Characterization:**

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

**Purification:**

Purification of the obtained oligomer was carried out rigorously as follows to ensure the removal of a catalyst side product:

1. The oligomer was stirred in de-ionized distilled water to remove the any soluble organic catalyst side product.
2. The oligomer was extracted from water with dichloromethane.
3. The oligomer solution in dichloromethane was dried over anhydrous sodium sulfate.
4. The solution was filtered and then passed through a column packed with basic Al<sub>2</sub>O<sub>3</sub>.
5. The solution was concentrated on rota-evaporator, and dried under vacuum for 48h at 38°C.

**<sup>1</sup>H NMR spectrum:**

