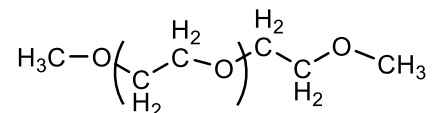


Sample Name:

**Poly(ethylene glycol) dimethyl ether**

Sample #: **P44279-EG2OCH<sub>3</sub>**

**Structure:**



**Composition:**

Mn x 10 <sup>3</sup>	PDI
4.0	1.03

**Synthesis Procedure:**

Poly (ethylene glycol) is obtained by living anionic polymerization and the reaction. End Hydroxy groups were converted to methyl ether.

**Characterization:**

The product was characterized by size exclusion chromatography (SEC) and <sup>1</sup>H NMR data analysis.

**Solubility:**

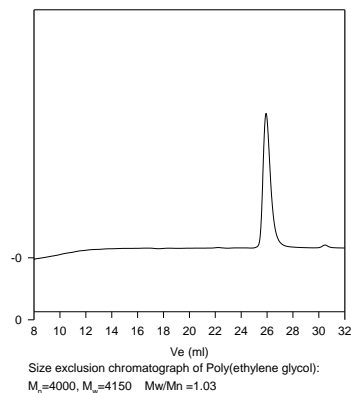
Poly(ethyl glycol) is soluble in toluene, THF, water and CHCl<sub>3</sub>. The polymer is insoluble in hexane, ether, isopropanol, and cold ethanol.

**Purification of the obtained polymer:**

Purification of the obtained polymer was carried out rigorously to ensure the removal of the catalyst side product:

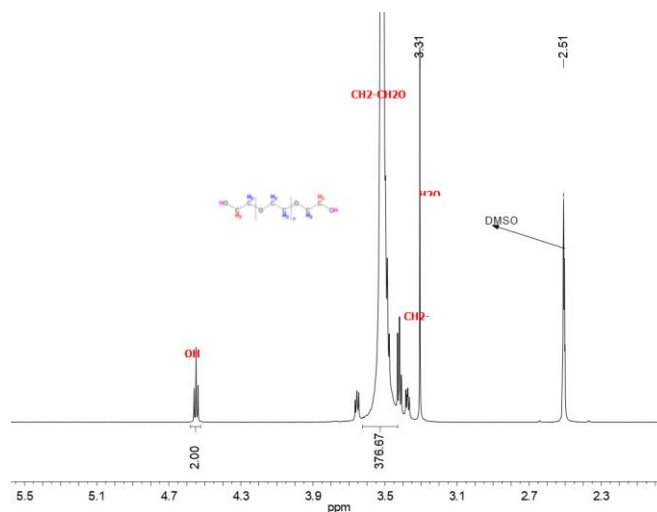
**Characterization data of Polyethylene glycol**  
**Mn 4000(Lot# P8015-EG2OH)**

**P8015-EG2OH**



**Thermal analysis results of polymer:**

Sample	T <sub>m</sub> (°C)	T <sub>c</sub> (°C)	T <sub>g</sub> (°C)
EG2OH	62	41	Not distinct



**HNMR spectrum of the product:**

