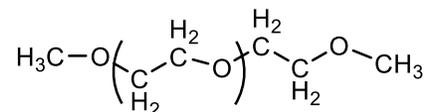


Sample Name:

**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.

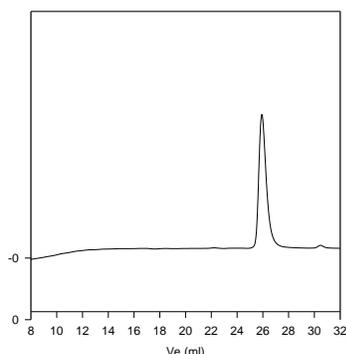
Purification of the obtained polymer:

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)**

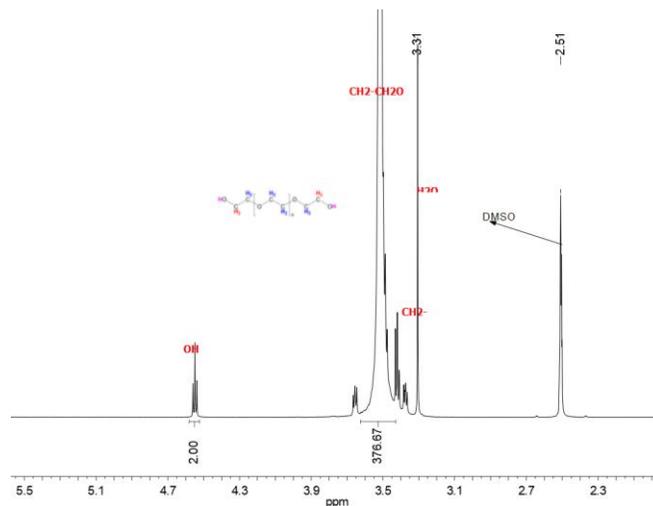
P8015-EG2OH



Size exclusion chromatograph of Poly(ethylene glycol):  
M<sub>n</sub>=4000, M<sub>w</sub>=4150 Mw/Mn = 1.03

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:**

