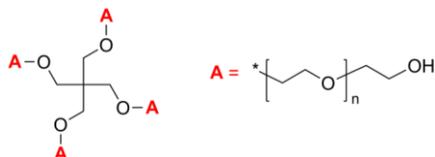


**Sample Name:** Poly(ethylene oxide),  
hydroxy-terminated 4-arm star polymer /  
**Core:** pentaerythritol

**Sample #:** P44290-4EOOH

**Structure:**

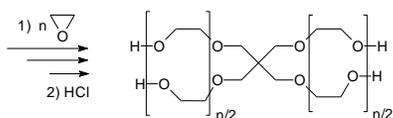
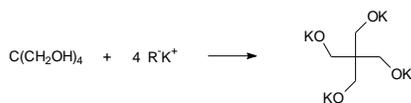


**Composition:**

Mn x 10 <sup>3</sup> (total)	PDI
14.0	1.10

**Synthesis Procedure:**

The polymer was prepared by anionic living polymerization of ethylene oxide using pentaerythritol potassium salt as the initiator. The scheme of the reaction is illustrated below:



**Characterization:**

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

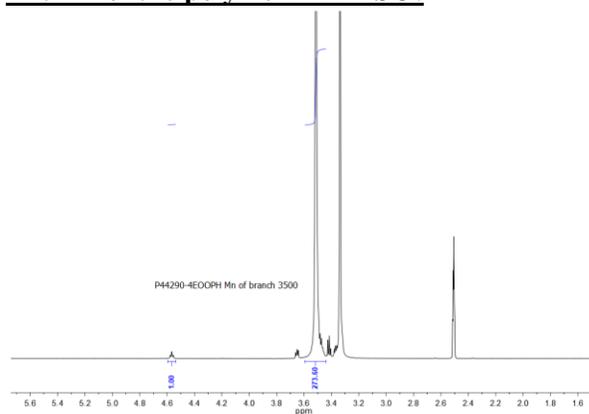
**Purification of the obtained polymer:**

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

**Solubility:**

Polymer is soluble in toluene, THF, water and CHCl<sub>3</sub>. The polymer is insoluble in hexane, ether, cold isopropanol, and ethanol.

**HNMR of the polymer in DMSO:**



**SEC elugram of the product:**

