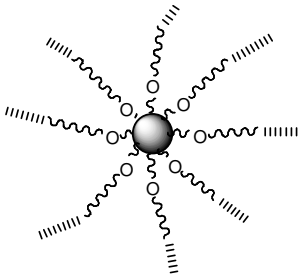
Sample Name:
8-arm Poly(Ethylene Oxide) terminated with Glutaric Acid; core: Hexaglycerol

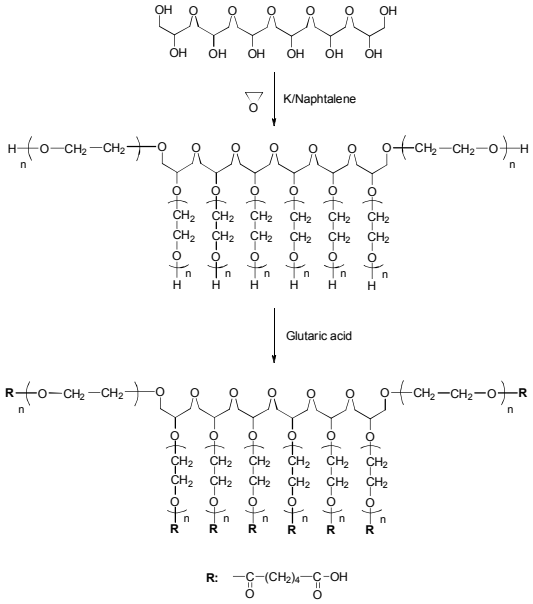
Sample #: **P18197A-8EO-COOH**



Eight arms PEG Terminated by Glutaric acid

Mn total	PDI
14.5 x 10^3	1.17
Mn of each arm: ~ 1.8 x 10^3	

Synthesis:



Purification:

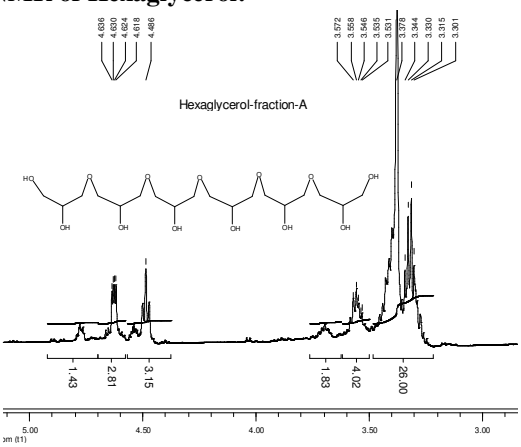
Purification of the obtained polymer was carried out rigorously as follows:

1. The polymer was dissolved in de-ionized distilled water to remove organic catalyst and/or by-products.
2. The polymer was extracted to dichloromethane.
3. The polymer solution in dichloromethane was dried over anhydrous sodium sulfate.
4. The solution was filtered and passed through a column packed with basic Al_2O_3.
5. The solution was concentrated on rotavap.
6. The product was precipitated in cold diethyl ether and dried under reduced pressure at 38°C for 48 h.

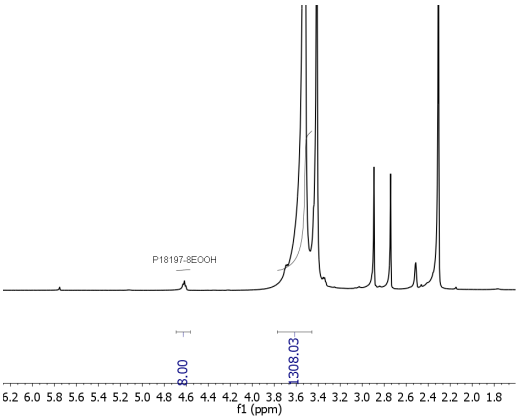
Characterization.

- ^{1}H NMR (500 MHz);
- Size exclusion chromatography (SEC): Varian liquid chromatograph equipped with UV and RI detectors.

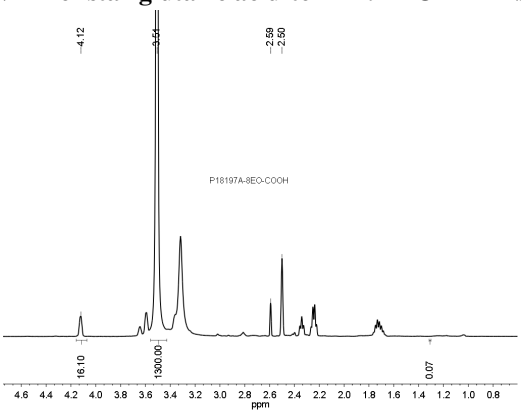
^{1}H NMR of Hexaglycerol:



^{1}H NMR of star non-terminated PEO in DMSO:



^{1}H NMR of star glutaric acid-termin. PEO in DMSO:



SEC star glutaric acid-termin. PEO: