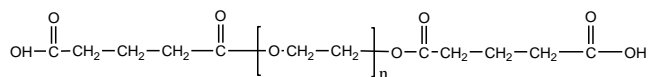


Sample Name:

α , ω -DiGlutaric acid Terminated
Poly(ethylene glycol)

Sample #: **P8901A-EG2GA**

Structure:

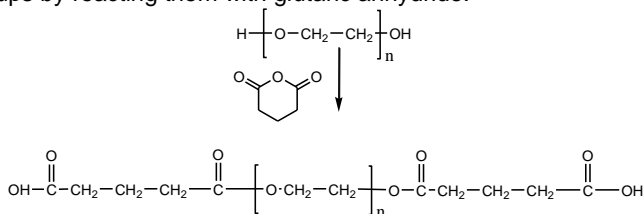


Composition:

Mn $\times 10^{-3}$	PDI	GA end functionality
10.0	1.10	> 90%

Synthesis Procedure:

α ω - disuccinic terminated poly(ethylene glycol) was synthesized by anionic living polymerization of ethylene oxide using ethylene glycol/potassium salt as an initiator. The hydroxyl end groups were converted into carboxyl groups by reacting them with glutaric anhydride.



Characterization:

The molecular weight and polydispersity index of this polymer were determined by size exclusion chromatography (SEC) using a Varian liquid chromatograph equipped with a UV and refractive index detector.

Functionality:

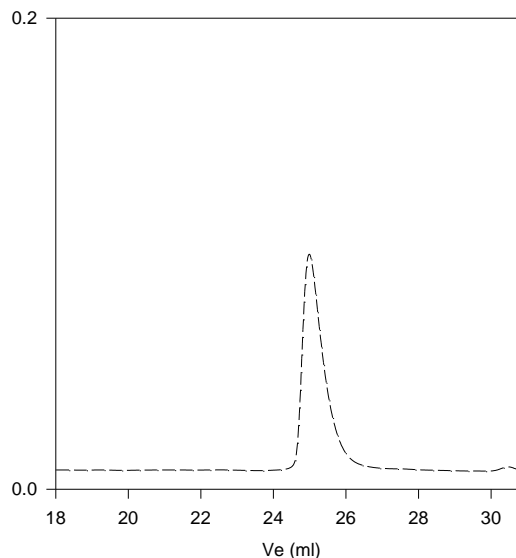
Functionality of the polymer was determined by H NMR analysis or FT-IR spectroscopy.

Solubility:

Polymer is soluble in water, methanol and ethanol, THF, CHCl_3 . It is precipitated out from cold isopropanol, hexane and ether.

SEC of Sample:

P8901A-EG2GA



Size exclusion chromatography:

--- Dihydroxyl terminated Poly(ethylene glycol), before reaction with Glutaric anhydride:
 $M_n=10000$, $M_w=11000$, $PI=1.10$

HNMR of Sample:

