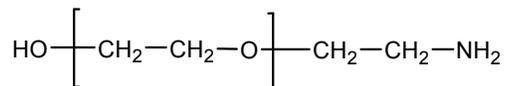


Sample Name:

α -amino ω -hydroxyl Terminated Poly(ethylene glycol)

Sample : P4450-EONH2OH

Structure:



Composition:

| $M_n \times 10^3$ | PDI |
|-------------------|------|
| 1.2 | 1.08 |

Synthesis Procedure:

α -Amino ω -hydroxyl terminated poly(ethylene glycol) was synthesized by proprietary method.

¹Please call us if you would like to know more.

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.

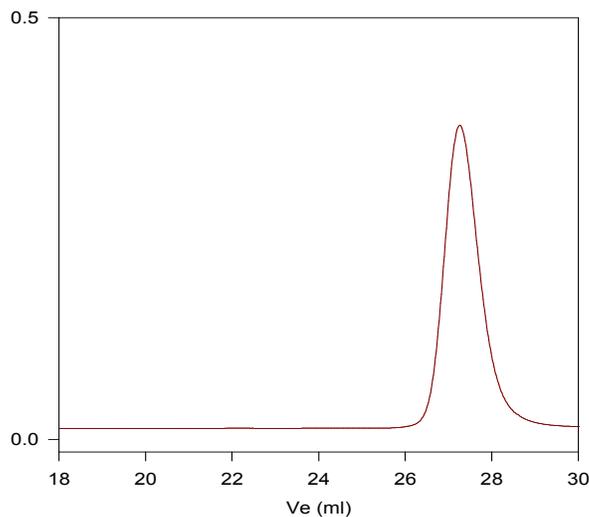
Functionality: Functionality of the polymer was determined by H NMR analysis or FT-IR spectroscopy or by titration.

Solubility:

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

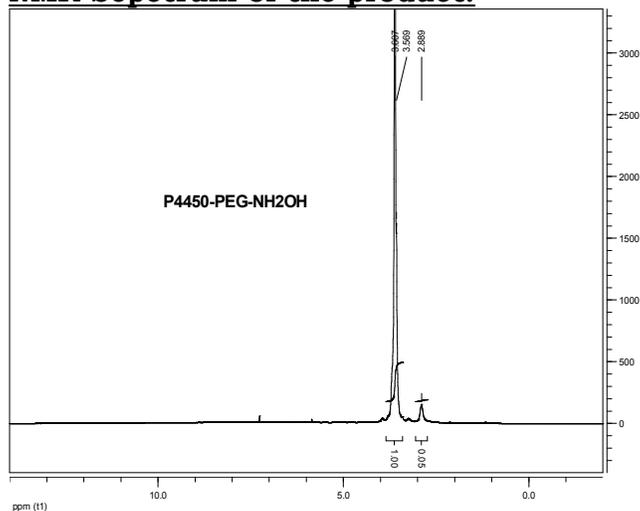
SEC of Sample:

P4450-EGOHNH2



Size Exclusion Chromatography of Mono amino mono hydroxy terminated polyethylene glycol
— Mn: 1200 Mw: 1300 Mw/Mn 1.08

NMR Sepctrum of the product:



References:

S. K. Varshney, J.X. Zhang, US patent 09/895, 323, 2001. Heterofunctional Polyethylene glycol and Poly ethylene oxide , process for their Manufacture

Thermal analysis of the sample# P4450-EONH2OH

Thermal analysis of the samples was carried out on a TA Q100 differential scanning calorimeter at a heating rate of 10°C/min. The midpoint of the slope change of the heat flow plot of the second heating scan was considered as the glass transition temperature (T_g).

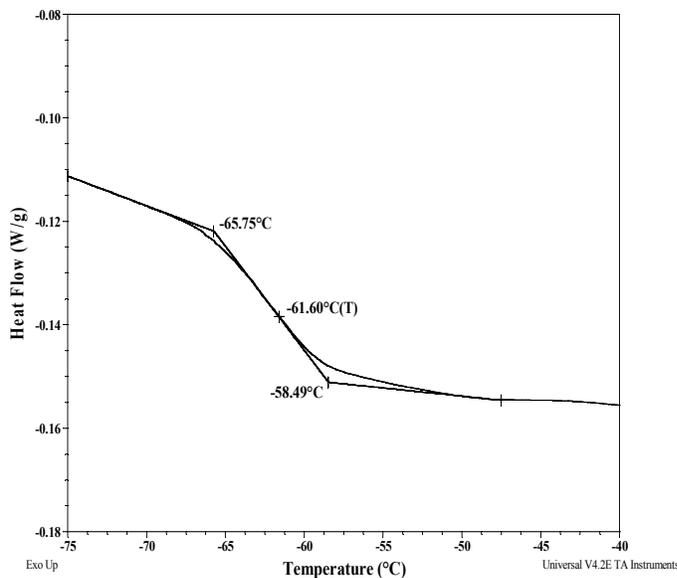
Melting and crystallization curve for the sample

The melting temperature (T_m) was taken as the maximum of the endothermic peak where as the crystallization temperature (T_c) was considered as the minimum of the exothermic peak.

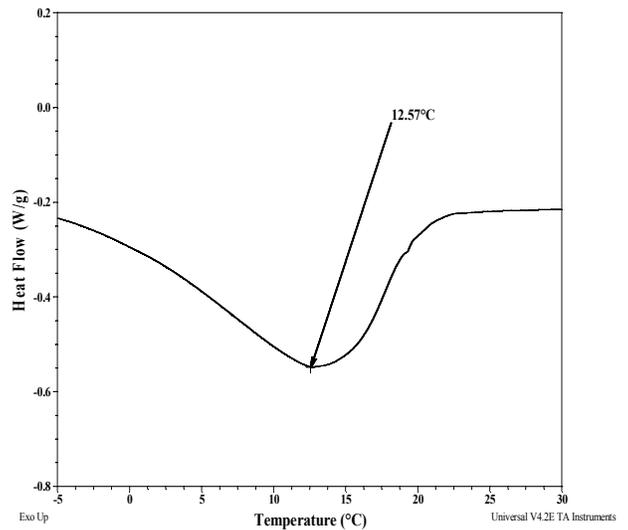
Thermal analysis results at a glance

| Sample | T_m (°C) | T_c (°C) | T_g (°C) |
|--------|------------|------------|------------|
| EGTMS | 13 | 0 | -62 |

DSC thermogram for the polymer:



Melting curve for the sample:



Crystallization curve for the sample:

