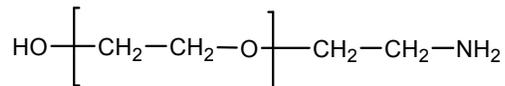


Sample Name:

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

Sample :P3478-EGNH2OH

Structure:**Composition:**

$M_n \times 10^3$	PDI
30.0	1.14

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.

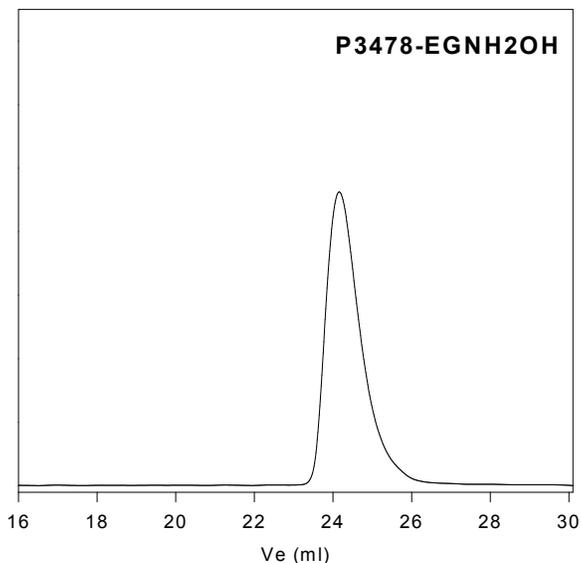
Characterization:

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:

Size exclusion chromatograph of α , amino ω hydroxy terminated poly(ethylene glycol):
 $M_n = 30000$, $M_w = 34000$ $M_w/M_n = 1.14$

References:

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

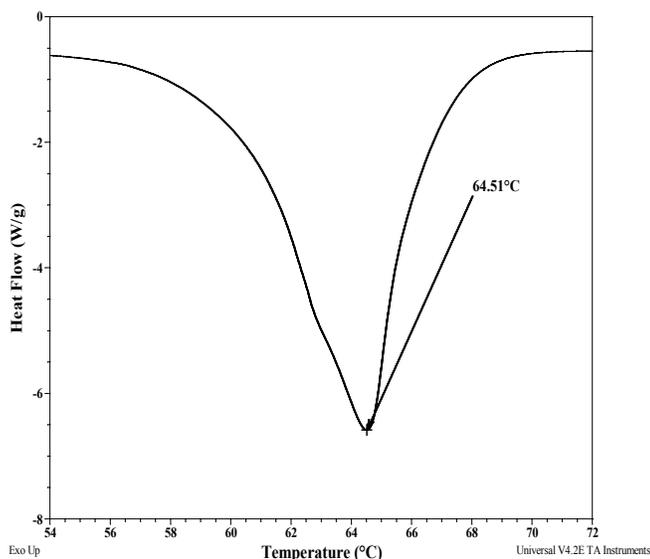
Thermal analysis of the sample# P3478-EONH2OH

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.

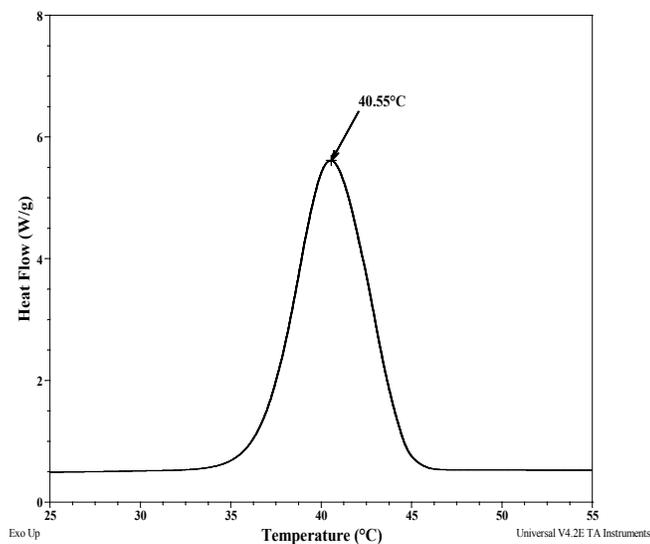
Melting curve for the sample:



Thermal analysis results at a glance

Sample	T_m (°C)	T_c (°C)	T_g (°C)
EGTMS	65	41	-45

Crystallization curve for the sample:



DSC thermogram for the polymer:

