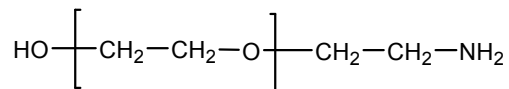


Sample Name:

**$\alpha$ -amino  $\omega$ -hydroxyl Terminated  
Poly(ethylene glycol)**

Sample: P3324-EGNH2OH

**Structure:**



**Composition:**

$M_n \times 10^3$	PDI
22.0	1.06

**Synthesis Procedure:**

$\alpha$ -Amino  $\omega$ -hydroxyl terminated poly(ethylene glycol) was synthesized by proprietary method.

\*Please call us if you would like to know more.

**Characterization:**

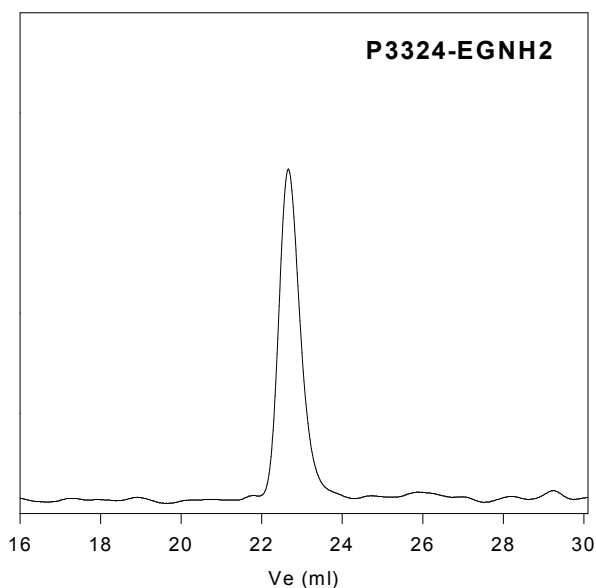
The molecular weight and polydispersity index of this polymer were determined by size exclusion chromatography (SEC) using a Varian liquid chromatograph equipped with a UV and refractive index detector.

**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,  $\text{CHCl}_3$ . It is precipitated out from cold ethanol, isopropanol, hexane and ether.

**SEC of Sample:**



Size exclusion chromatograph of  
 $\alpha$ , amino  $\omega$  hydroxy terminated poly(ethylene glycol):  
 $M_n = 22000$ ,  $M_w = 23500$   $M_w/M_n = 1.06$

**References:**

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

## Thermal analysis of the sample# P3324-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 ( $T_g$ ).

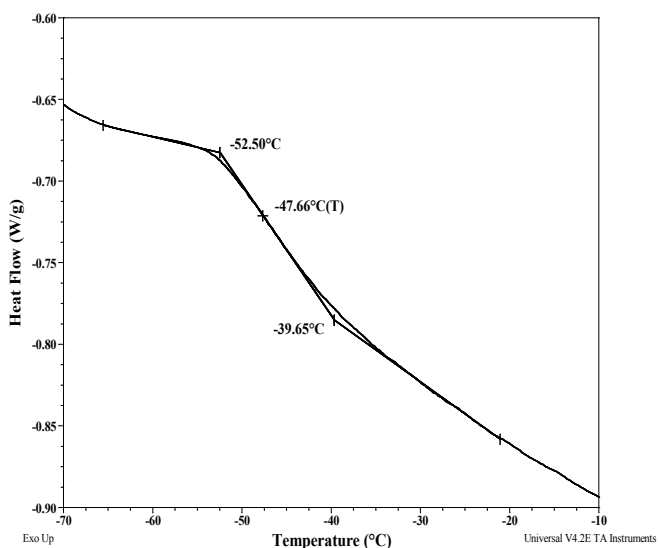
### Melting and crystallization curve for the sample

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.

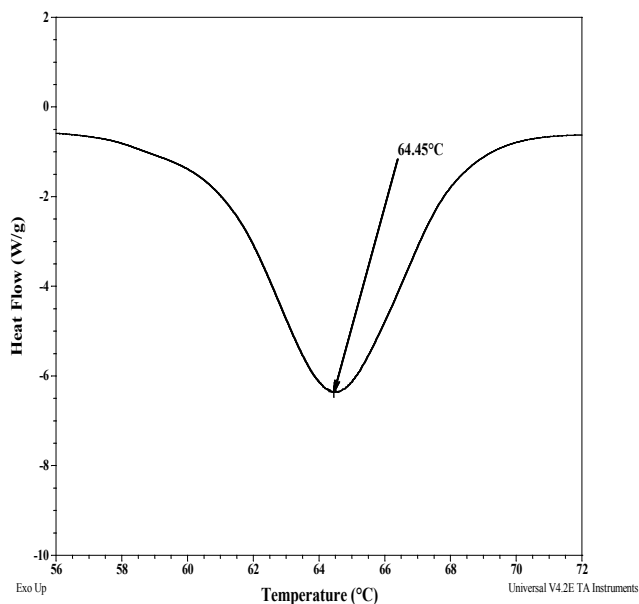
### Thermal analysis results at a glance

Sample	$T_m$ (°C)	$T_c$ (°C)	$T_g$ (°C)
EGTMS	64	42	-48

### DSC thermogram for the polymer:



### Melting curve for the sample:



### Crystallization curve for the sample:

