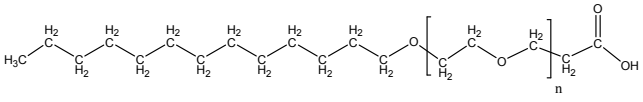
Sample Name:

α– tridecanol, ω-Propionic acid Terminated Poly(ethylene glycol)

Sample #: P10044A-EGtridecanolCOOH

Structure:



Composition:

Mn x 10^3	PDI
1.3	1. 09
Hydrolysis of Tert.butyl ester to COOH	<90%
Physical Appearance at room temperature	Liquid viscous and light off white color

Synthesis Procedure:

α– tridecaol, ω- Prropionic acid terminated poly(ethylene glycol) was synthesized by anionic living polymerization of ethylene oxide.

Characterization:

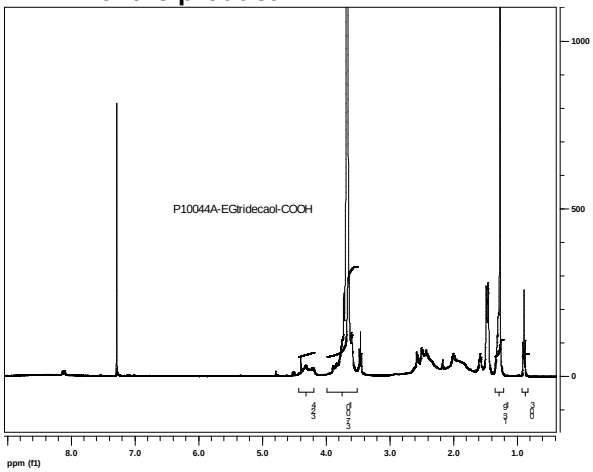
The molecular weight and polydispersity index of this polymer were determined by size exclusion chromatography (SEC) using a Varian liquid chromatograph equipped with a UV and refractive index detector.

Functionality: Functionality of the polymer was determined by H NMR analysis.

Solubility:

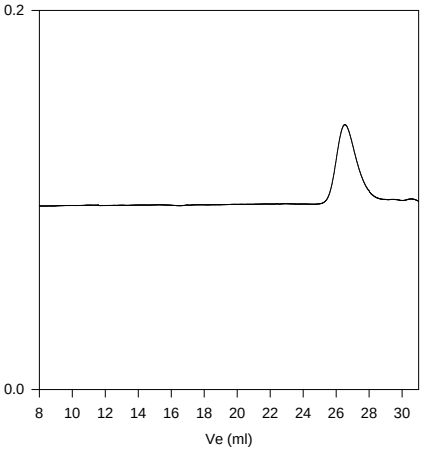
Polymer is soluble in chloroform and THF; it will be also soluble in water, methanol and ethanol. It is precipitated out from cold hexane and ether (-20°C).

H NMR of the product:



SEC profile

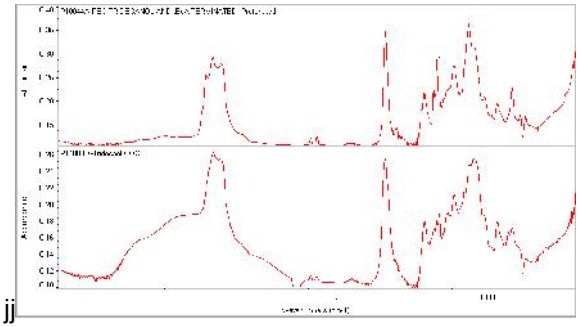
P10044A-EGTridecanol-OH Before converting to Propionic acid end group



Size exclusion chromatography:

Tridecanol terminated Poly(ethylene glycol)

M_n=1300, M_w=1400, PI=1.09



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