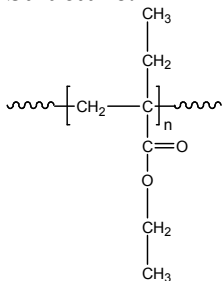


Sample Name: Poly (α -ethyl ethyl acrylate)

Sample #: P40404A-EEA

Structure:

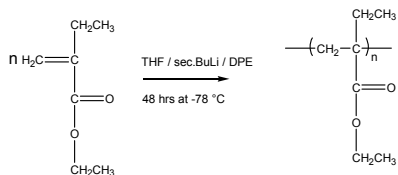
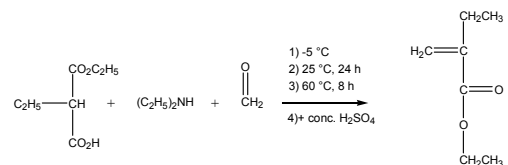
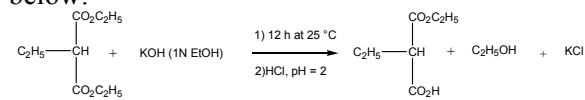


Composition:

Mn x 10 ³	PDI
6.5	1.13

Synthesis Procedure:

Poly (α -ethyl ethyl acrylate) is obtained by living anionic polymerization of ethyl α -ethyl ethyl acrylate. The reaction scheme used for the monomer and the polymer synthesis are shown below:



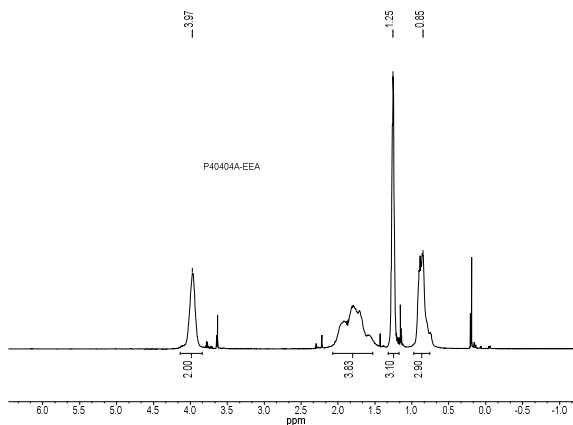
Characterization:

The molecular weight and polydispersity index (PDI) are obtained by size exclusion chromatography (SEC) in THF. SEC analysis was performed on a Varian liquid chromatograph equipped with refractive and UV light scattering detectors. Three SEC columns from Supelco (G6000-4000-2000 HXL) were used with triple detectors from Viscotek Co.

Solubility:

Poly (ethyl-ethyl acrylate) is soluble in THF, toluene and CHCl₃. This polymer precipitates from ethanol and methanol containing 10-15% water.

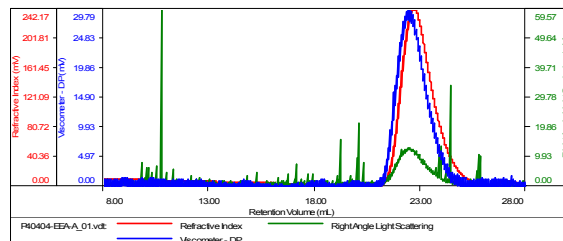
¹HNMR spectrum of the Polymer:



SEC elugram of Homopolymer:

P40404A-EEA

Concentration (mg/mL)	13.1957
Sample dn/dc (mL/g)	0.0890
Method File	PS80K-Nb2016-6-0000.vcm
Column Set	3x PL 1113-6000
Solvent	THF



Sample	Mn (Da)	Mw (Da)	Mw/Mn	IV (dL/g)	Mp (Da)
P40404-EEA_A_01.vdt	6,565	7,431	1.132	0.0921	7,279