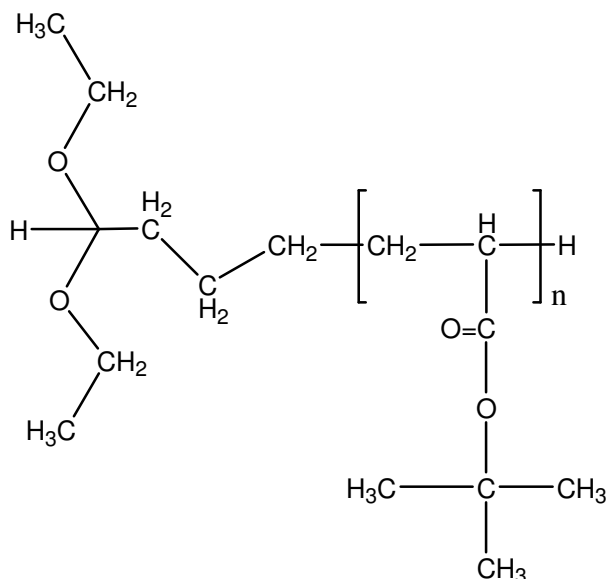


Sample Name:

Diethyl acetal propionaldehyde Terminated Poly(t-butyl acrylate)

Sample #: P8827-tBuA-acetal

Structure:



Composition:

Mn x 10 ³	PDI
2.0	1.2

Synthesis Procedure:

Diethyl acetal propionaldehyde Terminated Poly(t-butyl acrylate) is synthesized by living anionic polymerization of tert.butyl acrylate.

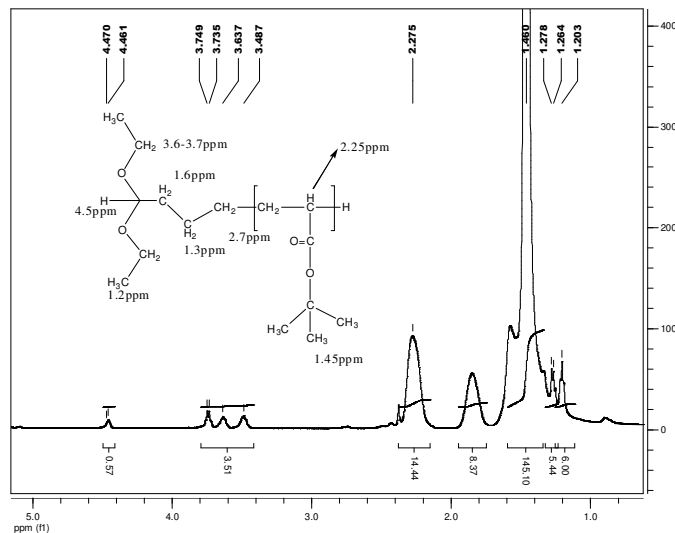
Characterization:

The molecular weight and polydispersity index of this polymer were determined by size exclusion chromatography (SEC) before inclusion of the CO₂H function using a Varian liquid chromatograph equipped with a UV and refractive index detector. The functionality of polymer was determined by the titration with NaOH, using phenolphthalein as the indicator.

Solubility:

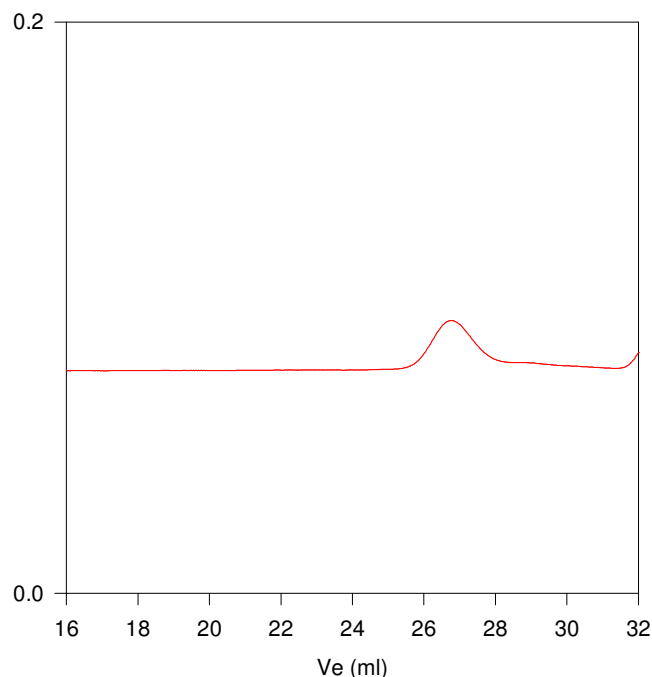
The functionalized polymer is soluble in THF, toluene and chloroform. It precipitates into Methanol/water mixture.

¹H NMR of the Polymer:



SEC elugram of the polymer:

P8827-tBuA-acetal



Size Exclusion Chromatography of Poly tert.Butyl acrylate

Mn : 2000 Mw:2400 Mw/Mn 1.2