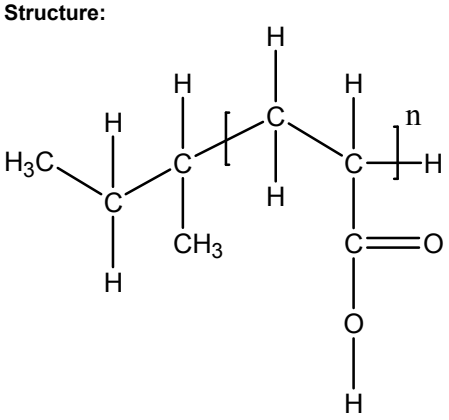
Sample Name:

Oligomers of acrylic acid obtained from the Hydrolysis of oligomer of tert.butyl acrylate

Sample #: **P8428-AA**

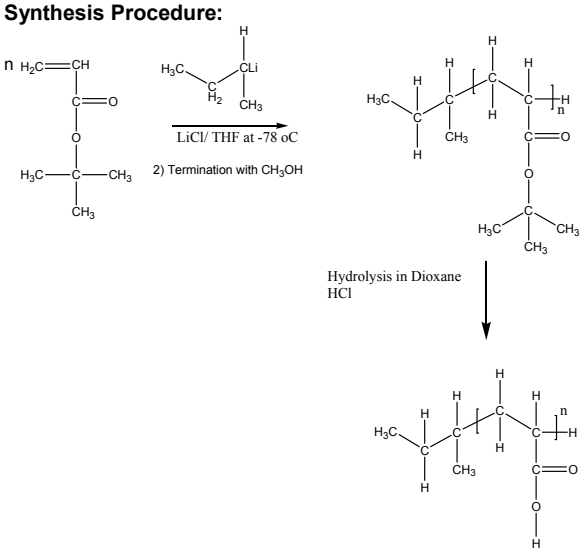
Structure:



Composition:

Value of n By HNMR	Mw/Mn
Dp: 13 Mn 930	1.2

Synthesis Procedure:



Characterization:

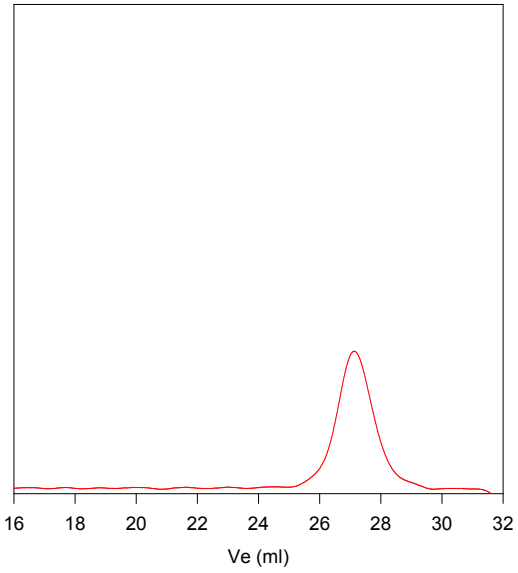
The molecular weight and polydispersity index (PDI) are obtained by size exclusion chromatography (SEC) in THF. SEC analysis was performed on a Varian liquid chromatograph equipped with refractive and UV light scattering detectors. Three SEC columns from Supelco (G6000-4000-2000 HXL) were used with triple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

Solubility:

Acrylic acid oligomers are soluble in Hexane, Methanol, ethanol and water.

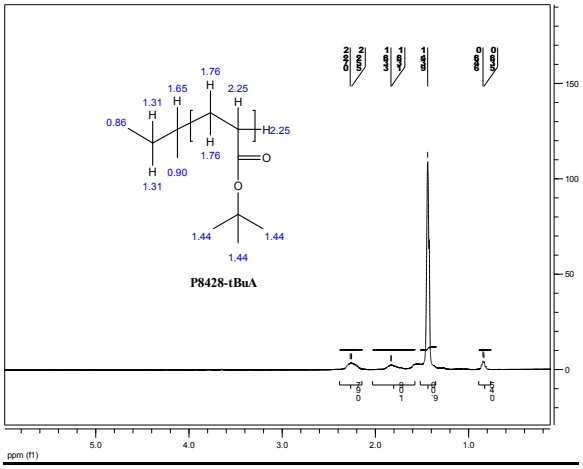
SEC of Sample:

P8428-tBuA Oligomer
Precursor for P8428A-AA



Size Exclusion Chromatography of Poly tert.Butyl acrylate oligomers
Dp: 13 by HNMR
Mn 1700 Mw: 2040 Mw/Mn 1,2
after Hydrolyis of the tert.butyl ester;
Mn 930 Mw: 1100 Mw/Mn 1.2

^{1}H NMR of the oligomer of tert.butylacrylate



References:

1. Ph. Teyssie, Ph. Bayard, R. Jerome, **S. K. Varshney**, and J. S. Wang, *35th IUPAC International Union of Pure & Applied Chemistry International Symposium on Macromolecules" 1994, 67.*
2. R. Fayt, R. Forte, C. Jacobs, R. Jerome, T. Ouhadi, Ph. Teyssie and **S. K. Varshney,** *Macromolecules, 1987, 20, 1442-1444.*
3. Jerome, R. Forte, **S. K. Varshney**, R. Fayt, and Ph. Teyssie, "The Anionic Polymerization of Alkylacrylates:A Challenge" in the Recent Advances in Mechanistic and Synthetic Aspects of Polymerization: M. Fontanaille and A. Guyot Ed., NATO ASI Series *C 215,101 (1987), CA Vol. 108, 12, 094992.*
4. Ph. Teyssie, R. Fayt, C. Jacobs, R. Jerome, L. Leemans, and **S. K. Varshney** *Am. Chem. Soc.,Polym. Prepr. 1988, 28, 2, 52-53*