# Sample Name: Poly(α-propyl acrylic acid)

# <u>Sample #:</u> P18861B-PrAA (lot synthesized by direct polymerization of PrAA monomer using radical process)

## Structure:

$$CH_2CH_2CH$$
 $CH_2$ 
 $CH_2$ 
 $CO_2H$ 

### Composition:

Mn x 10 <sup>3</sup>	PDI
22.0	2.5

# **Synthesis Procedure:**

Poly( $\alpha$ -propyl acrylic acid) is synthesized as illustrated in the following scheme:

reagent

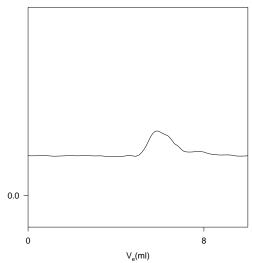
### Characterization:

The molecular weight and polydispersity index (PDI) of Poly( $\alpha$ -propyl acrylic acid) are obtained by size exclusion chromatography in DMF.

### Solubility:

Polymer is soluble in THF, Dioxane and alkaline ethanol, methanol

# SEC of Homopolymer: P18861B-PrAA



Size exclusion chromatography of Poly(alpha-propylacrylic acid) in DMF with respect to Polystyrene Standards:

Mn = 22,000 Mw: 55,000 Mw/Mn: 2.5