Sample Name: Poly (α-propyl acrylic acid)

Sample #: P40739A-PrAA

#### **Structure:**

$$H_3C$$
 $CH_2$ 
 $H_2C$ 
 $CH_2$ 
 $CH_2$ 

# **Composition:**

Mn x 10 <sup>3</sup>	PDI
2.5	1.18

## **Synthesis Procedure:**

Poly ( $\alpha$ -propyl acrylic acid) is synthesized from Poly ter.butyl propyl acrylate after hydrolysis of its ester.

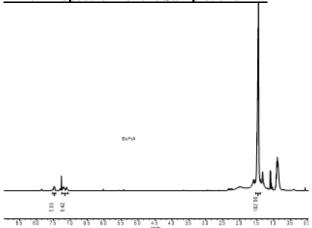
### **Characterization:**

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

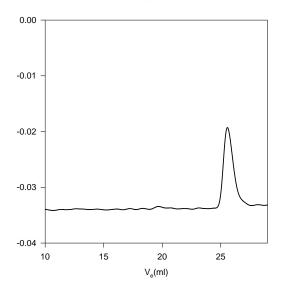
### **Solubility:**

Polymer is soluble in methanol, DMF and can be solubilized in water in the form of sodium salt.

## <sup>1</sup>H NMR spectrum of the Sample: tBuPrA



## SEC elugram of Homopolymer tBuPrA#40739:



Size exclusion chromatography of Poly(alpha-propyl tert.butyl acrylate)

Mn = 3,500; Mw =4,000; PI = 1.18