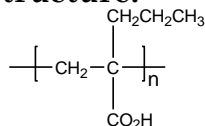


Sample Name:
Poly(α -propyl acrylic acid)

Sample #: P6377-PrAA

Structure:

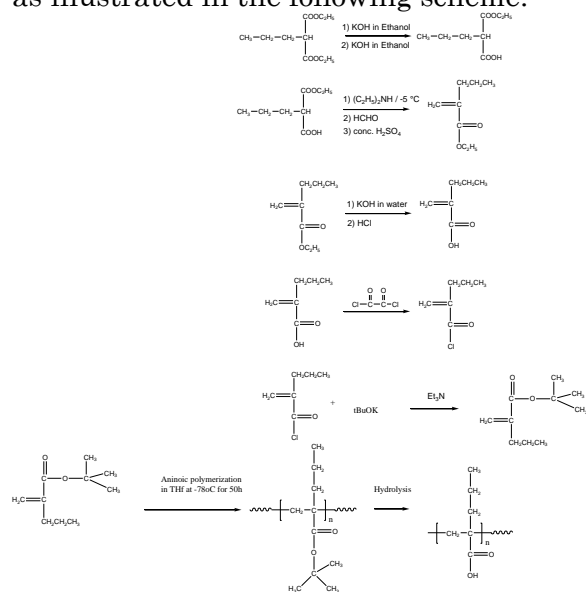


Composition:

$M_n \times 10^3$	PDI
2.0	2.5
$T_g (^{\circ}\text{C})$	195

Synthesis Procedure:

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



Characterization:

The molecular weight and polydispersity index (PDI) of poly(α -propyl acrylic acid) are obtained by size exclusion chromatography.

Thermal analysis:

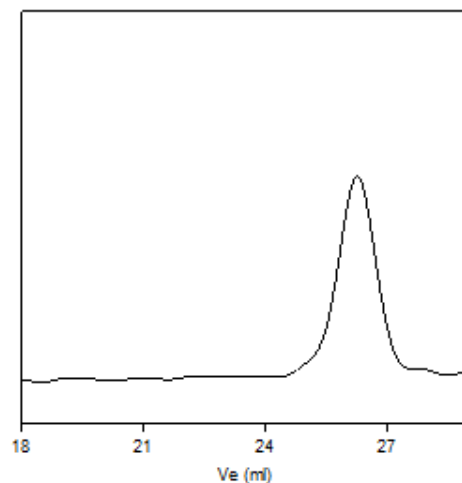
Thermal analysis of the samples was carried out on a TA Q100 differential scanning calorimeter at a heating rate of 10°C/min. The midpoint of the slope change of the heat flow plot of the second heating scan was considered as the glass transition temperature (T_g).

Solubility:

Polymer is soluble in ethanol, methanol THF and dioxane.

SEC of homopolymer:

P6377-PrAA
SEC of precursor



Size Exclusion Chromatography of Poly(α -propyl tert-butyl acrylate)
After Hydrolysis of tert. butyl ester:
Poly(α -propyl acrylic acid): $M_n=2000$ $M_w/M_n=2.5$

DSC thermogram for the polymer:

