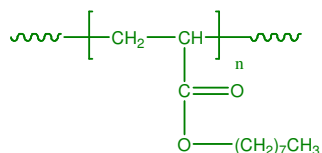


Sample Name: Poly(n-octyl acrylate)

Sample #: P4891-nOctA

Structure:

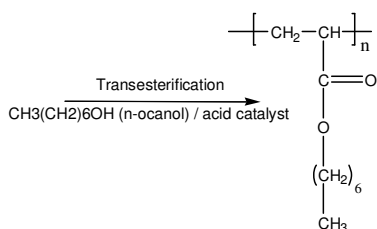
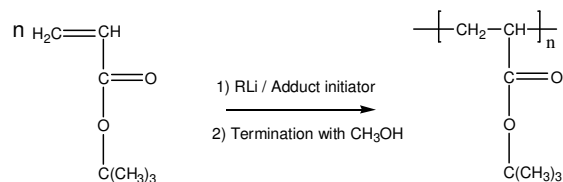


Composition:

$M_n \times 10^3$	PDI
28.0	1.10

Synthesis Procedure:

Poly(n-octyl acrylate) is obtained by the transesterification reaction with poly tert-butylacrylate in the presence of 1-octanol. The reaction scheme is shown below:



Characterization:

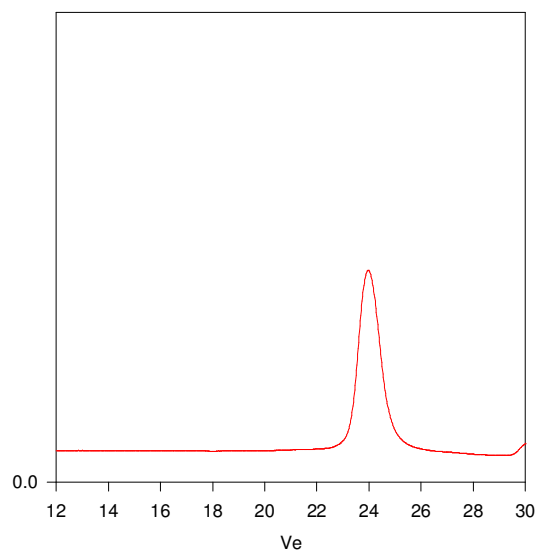
The molecular weight and polydispersity index (PDI) are obtained by size exclusion chromatography (SEC) in THF. SEC analysis was performed on a Varian liquid chromatograph equipped with refractive and UV light scattering detectors. Three SEC columns from Supelco (G6000-4000-2000 HXL) were used with triple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

Solubility:

Poly(n-octyl acrylate) is soluble in THF, toluene and CHCl_3 . This polymer precipitates from ethanol and methanol containing 10-15% water.

SEC of the Homopolymer:

P4891-nOctA



Size Exclusion Chromatography of Poly(n-octyl acrylate):

$M_n = 28,000$, $M_w = 31,000$, $M_w/M_n = 1.10$