Sample Name: Poly(benzyl α-ethyl acrylate)

Sample #: P3463-EBA

Structure:

Composition:

Mn x 10 ³	PDI
7.5	1.4

Synthesis Procedure:

Polymer is obtained by living anionic polymerization in THF at -78oC. The monomer is synthesized by the route shown below:

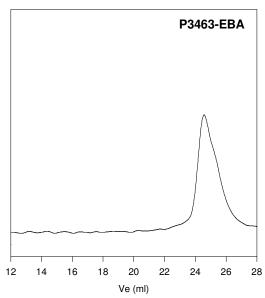
$$\begin{array}{c} \text{COOC}_2H_6 \\ \text{CH}_9-\text{CH}_2-\text{CH} \\ \text{CH}_9-\text{CH}_2-\text{CH} \\ \text{COOC}_3H_6 \\ \end{array} \begin{array}{c} \text{COOC}_2H_6 \\ \text{2) KOH in Ethanol} \\ \text{CH}_9-\text{CH}_2-\text{CH}_2-\text{CH}_2 \\ \text{COOH} \\ \end{array}$$

Characterization:

Solubility

Poly(benzyl $-\alpha\text{-}ethyl$ acrylate) is soluble in THF, CHCl $_3$ and toluene, and can be precipitated from cold ethanol and methanol.

SEC of sample:



Size exclusion chromatography of poly(benzyl α -ethylacrylate):

Mn = 7500; Mw = 10000; PI = 1.4.