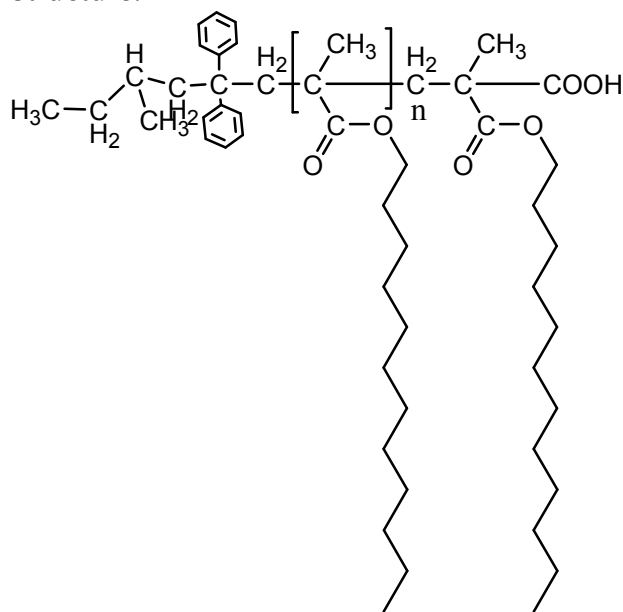


Sample Name:
Carboxy Terminated Poly(lauryl methacrylate)

Sample #: P10225-LMACOOH

Structure:



Composition:

Mn x 10 ³	PDI
10.5	1.20
COOH functionality	78%
T _g for the functionalized polymer	

Synthesis Procedure:

Carboxy Terminated Poly(lauryl methacrylate) was prepared by anionic living polymerization of lauryl methacrylate in THF and termination of the polymerization with dried CO₂.

Characterization:

The molecular weight and polydispersity index of this polymer were determined by size exclusion chromatography (SEC) using a Varian liquid chromatograph equipped with a UV and refractive index detector before the termination with CO₂. COOH functionality was determined by titration.

Thermal analysis:

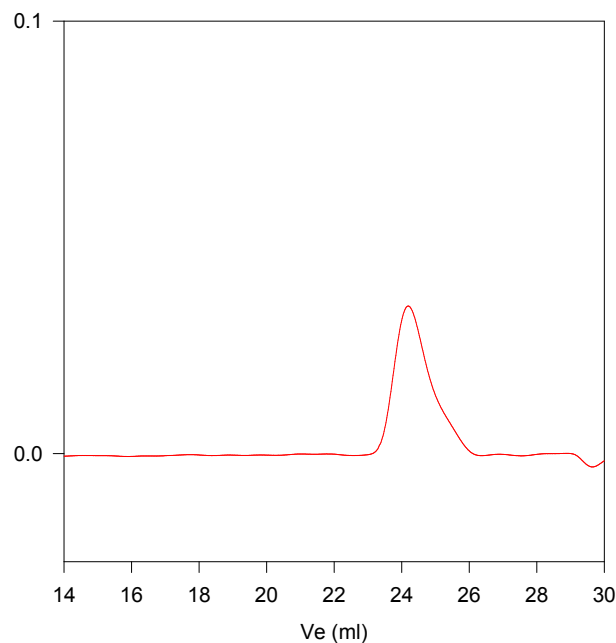
Thermal analysis of the samples was carried out using a differential scanning calorimeter (TA Q100) at a heating rate of 10°C/min. The inflection glass transition temperature (T_g) has been considered.

Solubility:

The polymer is soluble in THF, Toluene, chloroform and acetone.

SEC of Sample:

P10225-LMACOOH



Size exclusion chromatography of α -carboxy Terminated poly(lauryl methacrylate):

M_n=10,000, M_w=12,000, PI=1.2

DSC thermogram for the sample: