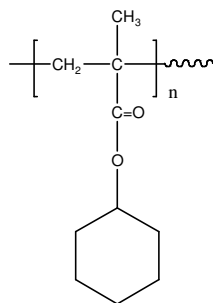


Sample Name: Poly(cyclohexyl methacrylate)

Sample #: P5423B-CHMA

Structure:



Composition:

$M_n \times 10^3$	PDI
120.0	2.1
T_g (°C)	112
Syndio:Hetero	55%: 45%

Synthesis Procedure:

Poly(cyclohexyl methacrylate) is obtained by one of the following technique: by living anionic polymerization or GTP process.

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. ^1H NMR analysis was carried out on Varian instrument at 500MHz.

Thermal analysis of the sample:

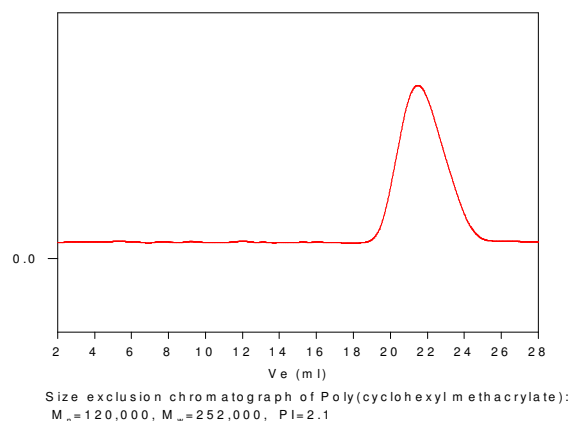
Thermal analysis of the samples was carried out on a TA Q100 differential scanning calorimeter at a heating rate of 10°C/min. The midpoint of the slope change of the heat flow plot of the second heating scan was considered as the glass transition temperature (T_g).

Solubility:

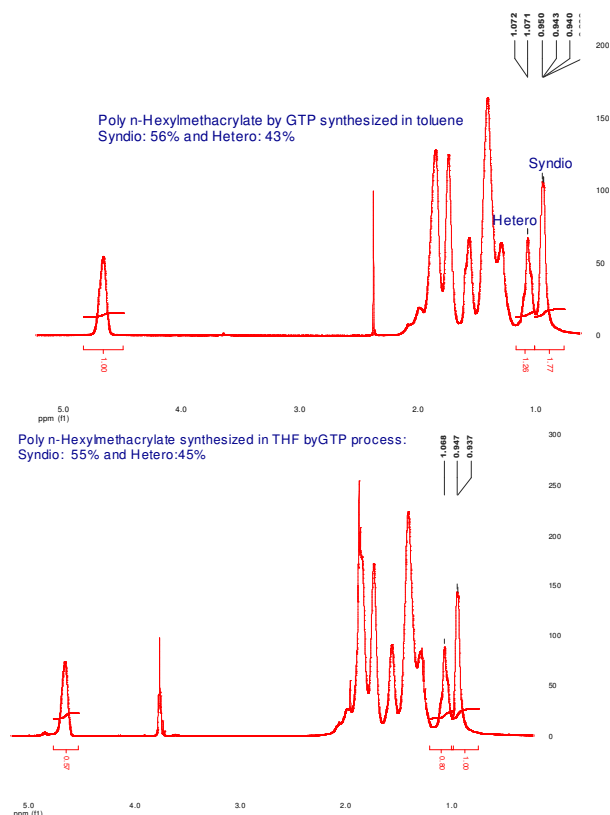
Poly(cyclohexyl methacrylate) is soluble in THF, CHCl_3 , toluene and dioxane. The polymer precipitates from hexanes, methanol and ethanol.

SEC of Sample:

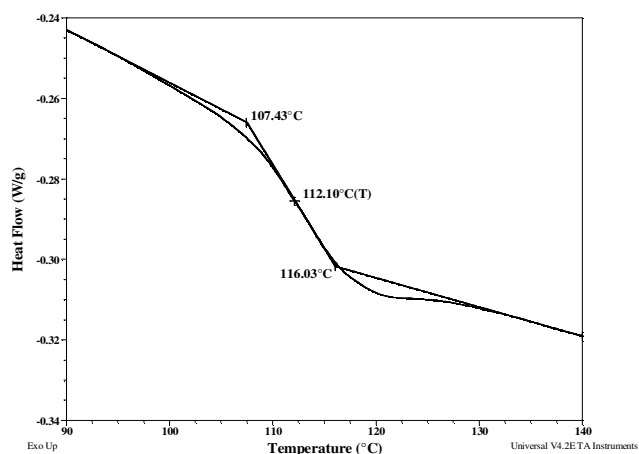
P 5 4 2 3 B - C H M A



NMR:



DSC thermogram for the sample:



References for further information:

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- Ph. Teyssie, R. Fayt, J. P. Hautekeer, C. Jacobs, R. Jerome, L. Leemans and S. K. Varshney *Makromolekulare Chemie, Macromol. Symp.*, 1990, 32, 61-73.
- S. K. Varshney, J. P. Hautekeer, R. Fayt, R. Jerome, and Ph. Teyssie *Macromolecules*, 1990, 23, 2618-2622.