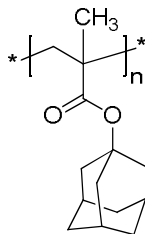


Sample Name: Poly(1-adamantyl methacrylate)

Sample # P10223-ADMMA

Structure:



Composition:

$M_n \times 10^3$ (g/mol)	3.0
M_w/M_n	1.35
Microstructure tacticity:	Heterotactic > 85%
Glass transition temperature, T_g	195 °C

Synthesis:

Poly(1-adamantyl methacrylate) is obtained by living anionic, free radical, or by group transfer (GTP) polymerization methods.

Characterization:

The molecular structure and purity of the polymer were confirmed by proton NMR spectroscopy.

The molecular weight and polydispersity index (M_w/M_n) of the polymer were obtained by size exclusion chromatography (SEC) using THF as an eluent.

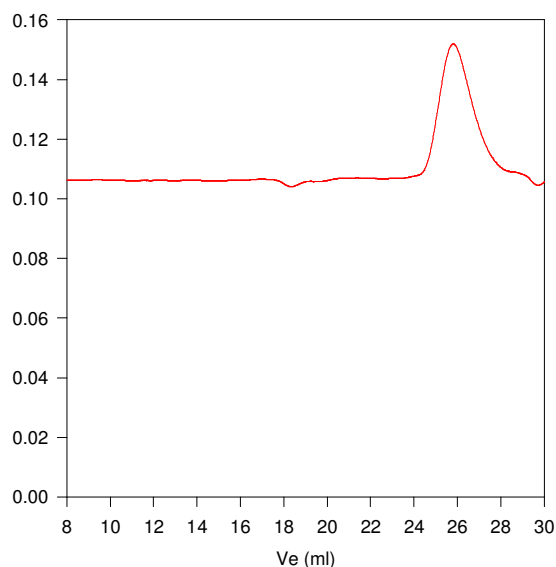
Thermal analysis was performed on TA Instruments Q100 differential scanning calorimeter (DSC) under a nitrogen atmosphere. The glass transition temperature (T_g) of the polymer was measured at a scan rate of 10°C/min shortly after creating thermal history of the sample.

Solubility:

Poly(1-adamantyl methacrylate) is soluble in THF, chloroform, toluene, and 1,4-dioxane. The polymer precipitates from hexanes, methanol, and ethanol.

SEC elugram of the polymer:

P10223-ADMMA



Size exclusion chromatograph of Poly adamantyl methacrylate:

$M_n=3,000$, $M_w=4,000$, $PI=1.35$