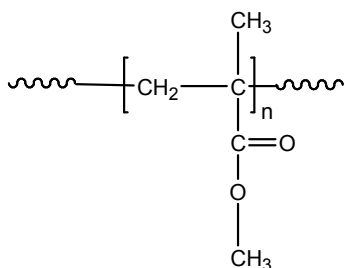


Sample Name: Poly (methyl methacrylate)
Different Microstructure

Sample #: P40529J-MMA

Structure:



Composition:

Mn x 10 ³	PDI
473.5	1.18

Syndio : Hetero : Iso	59:37:4
T _g	127 °C

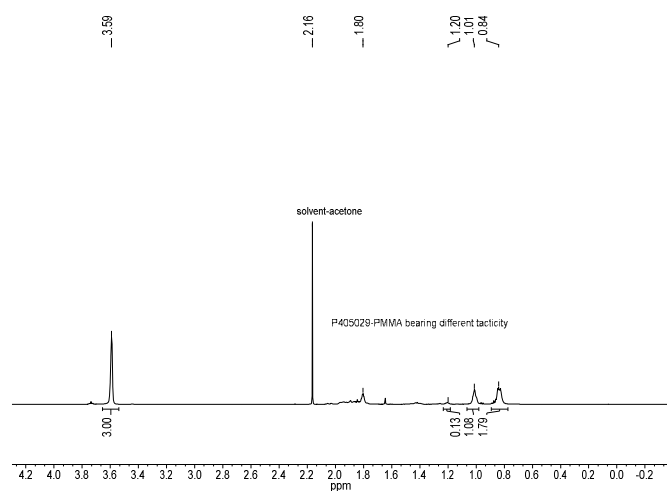
Synthesis Procedure:

The polymer was synthesized by anionic polymerization.

Characterization:

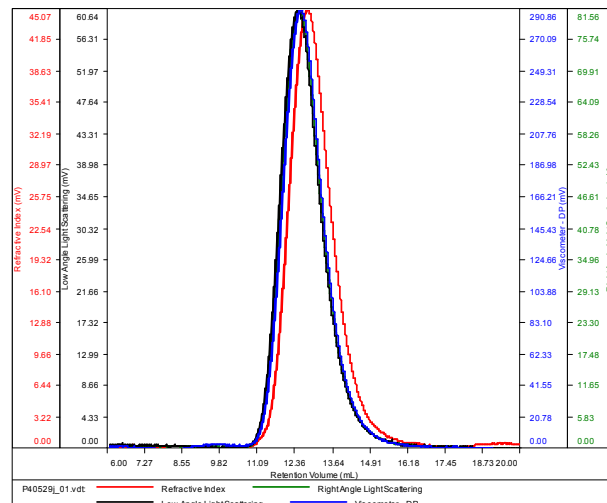
The product was characterized by size exclusion chromatography (SEC) and ¹H NMR.

¹H NMR spectrum of PMMA:



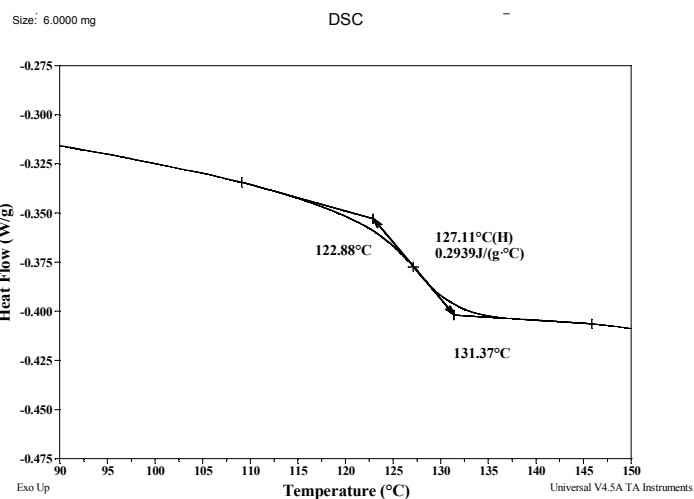
SEC elugram of PMMA homopolymer:

Conc	7.3066
dn/dc	0.0650
Solvent	DMF w 0.023M LiBr
Flow Rate	0.7000
Method	PS80k-March2017-0002.vcm



Sample	Mn	Mw	Mp	Mw/Mn	IV
P40529j_01.vdt	473,477	559,517	512,390	1.182	0.7181

DSC thermogram of the polymer

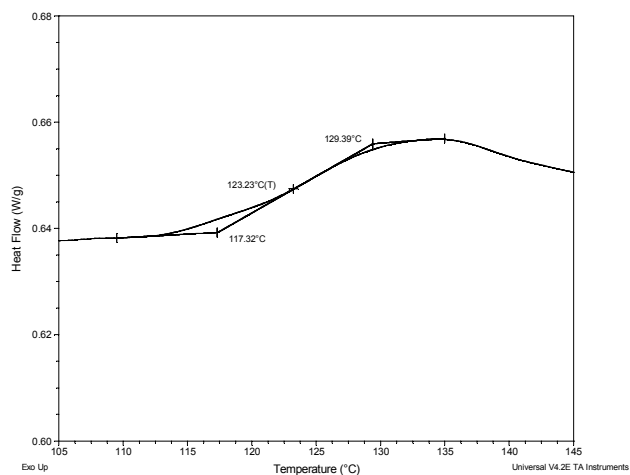


Thermograms of PMMA:

(a) syndiotactic >79%



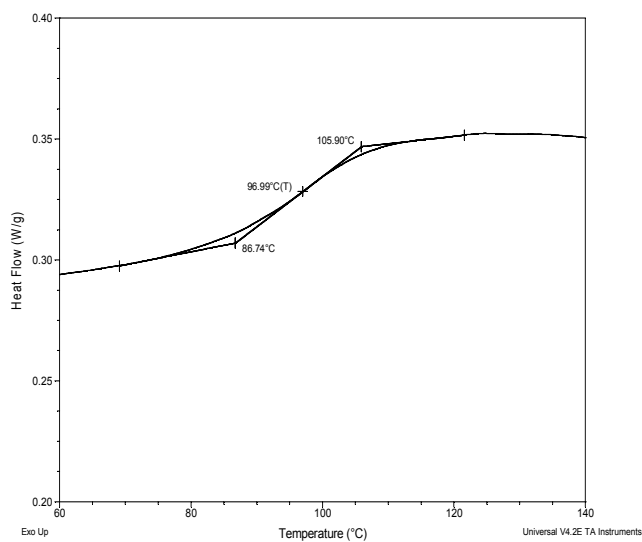
(b) syndiotactic >85%



(c) isotactic >97%



(d) atactic



Summary of DSC results for PMMA of different tacticity:

<i>PMMA microstructure</i>	<i>Tacticity Syndio : Iso : Hetero</i>	<i>T_g (°C)</i>
Syndiotactic >79%	79 : 19 : 2	120
Syndiotactic >85%	86 : 0 : 14	123
Isotactic >97%	0 : 97 : 3	44
Atactic	56 : 6 : 38	97