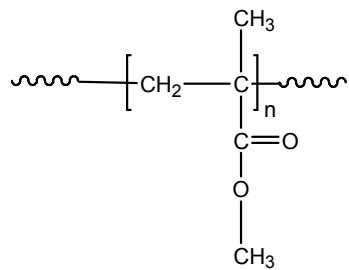


Sample Name: Poly (methyl methacrylate)
Atactic polymer

Sample #: P40228-MMA

Structure:



Composition:

Mn x 10 ³	PDI
99.0	1.12

Syndio : Hetero : Iso	40 : 55 : 5
T _g	104°C

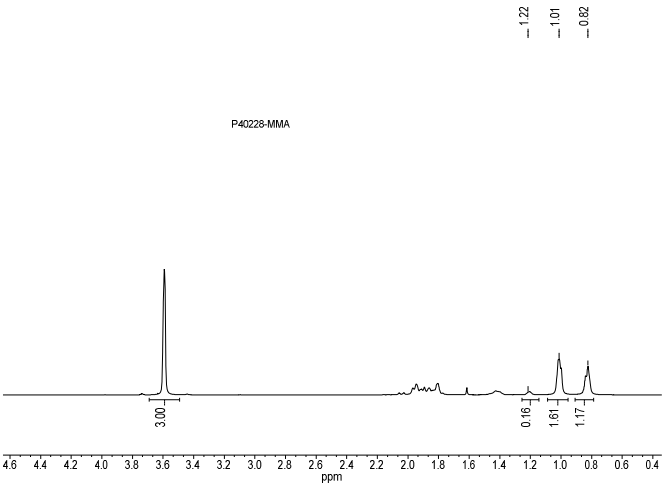
Synthesis Procedure:

The polymer was synthesized by anionic polymerization.

Characterization:

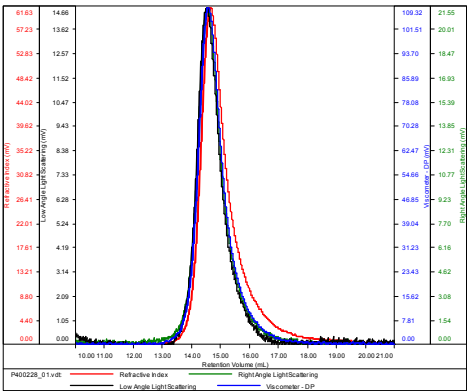
The product was characterized by size exclusion chromatography (SEC) and ¹H NMR.

¹H NMR spectrum of PMMA:



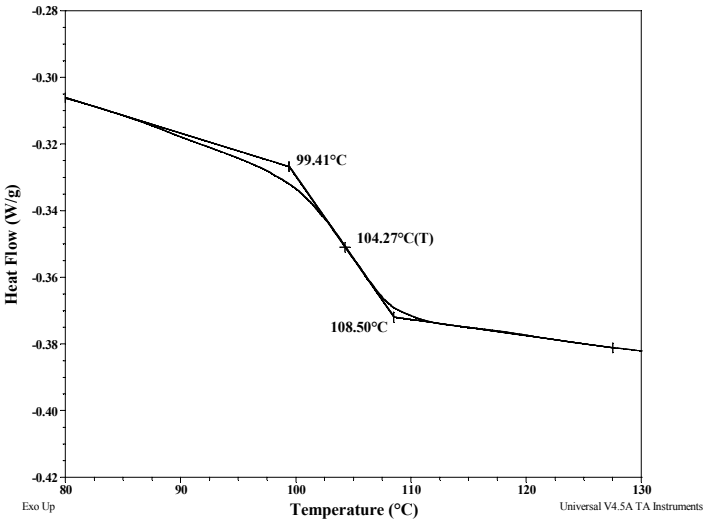
SEC elugram of PMMA homopolymer:
P40228-MMA

Conc (mg/mL)	6.6536
dn/dc (mL/g)	0.0650
Method	PS80k-Nov162016-0000.vcm
Solvent	DMF w 0.023M LiBr
Column	PSS



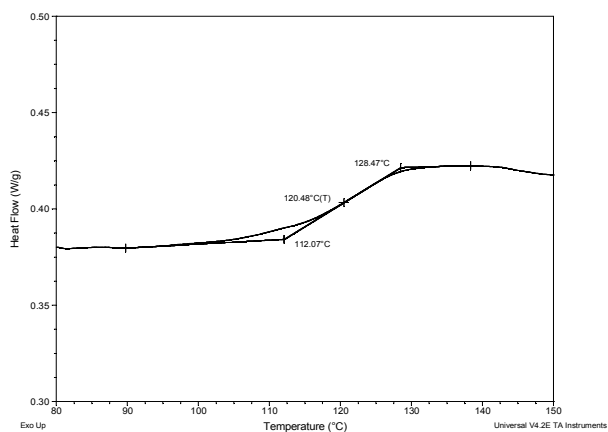
Sample	Mn	Mw	Mp	Mw/Mn	IV
P400228_01.vrt	98,607	111,007	117,486	1.126	0.1961

DSC thermogram of the polymer

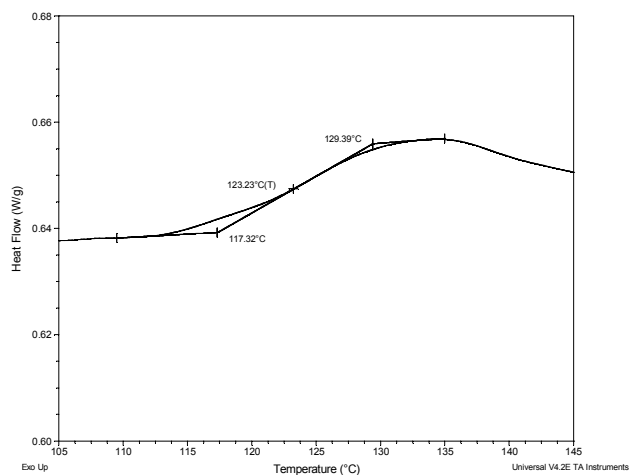


Thermograms of PMMA:

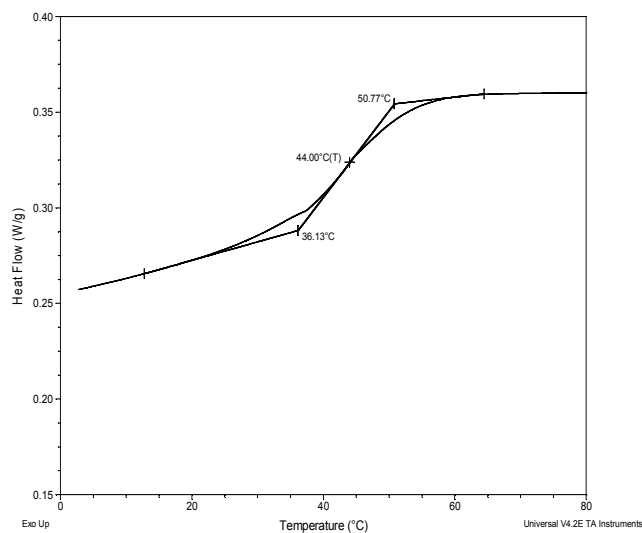
(a) syndiotactic >79%



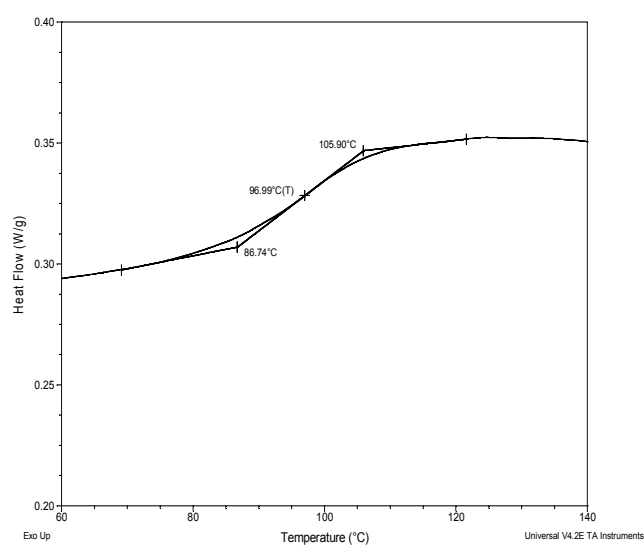
(b) syndiotactic >85%



(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