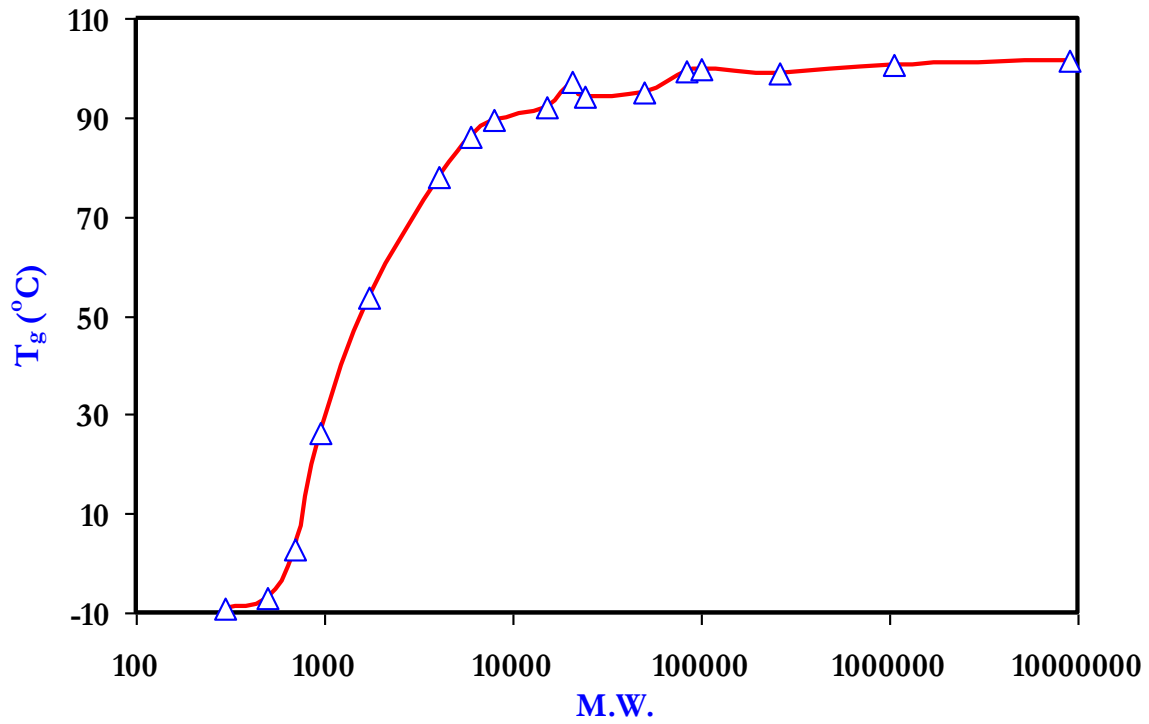


## Thermal analysis data for some polymers synthesized at Polymer Source (@10 °C/min)

Thermal analysis (TA) data (glass transition temperature,  $T_g$ ; melting temperature,  $T_m$ , and crystallization temperature,  $T_c$ ) are dependent on molecular weight, polymeric architecture, synthesis route, presence of monomers and moisture content). Glass Transition is a method to characterize a property of a polymeric material. The glass transition is the temperature where the polymer goes from a hard, glass like state to a rubber like state. For precise TA data please consult our specific product data sheet.

Polymer	$T_g$ (°C)	$T_m$ (°C)	$T_c$ (°C)
Poly(1-vinyl anthracene) (6.7k)	261		
Poly(2-hydroxyethyl methacrylate) (45k)	109		
Poly(2-vinyl pyridine) (97k)	95		
Poly(4-vinyl pyridine) (25k)	151		
Poly(AzoMA) (21.5k)		107	102
Poly(Cyclohexyl acrylate) (130k)	31		
Poly(ethylene glycol) (90k)	-54	66	48
Poly(isobutyl-POSS methacrylate) (16k)	-	99	84
Poly(lactide)-D form (30k)	68	174	107
Poly(lactide)-DL form (38k)	50	-	-
Poly(lactide)-L form (26.5k)	54	174	102
Poly(methacrylic acid)	220		
Poly(methyl methacrylate) (100k) syn	120		
Poly(methyl vinyl ether) (24k)	-25		
Poly(N,N-dimethyl acrylamide)(100k)	123		
Poly(N,N-Dimethylacrylamide)	89		
Poly(N-Isopropylacrylamide)	90-130		
Poly( $\alpha$ -ethyl acrylic acid) (203k)	46		
Poly( $\alpha$ -propyl acrylic acid) (9.5k)	143		
Poly( $\epsilon$ -caprolactone) (60k)	-72	65	29
Polyacrylic acid (1.8k)	70		
Polybutadiene (1, 2 addition) (105k)	-21	-	-
Polybutadiene (1, 4 addition)			
Polybutadiene (1, 4 addition) (50k)	-77		
Polydimethylsiloxane	-127		-81
Polyethylene (103k)	-	98	77
Polyisobutylene (40k)	-66	-	-
Polyisoprene ((1,2 and 3,4 addition) (30k)	-09		
Polystyrene ( $M_n > 40k$ )	99-101	-	-



**T<sub>g</sub> of polystyrene as function of molecular weight**

**Effect of microstructure on T<sub>g</sub> of Poly methyl methacrylates (M<sub>n</sub> about 30000)**

<i>Type of microstructure</i>	<i>T<sub>g</sub> (°C)</i>
Syndiotactic content >79%	120
Syndiotactic content >85%	123
Isotactic (iso content 97%)	44
Atactic (Syndio≈56%; hetro 38% & iso 6%)	97