

10.1071/CH09358\_AC

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Accessory Publication: Australian Journal of Chemistry, 2009, 62(8), 891–898

## Accessory Publication

### PMMA star-like polymers via one-pot conventional free-radical copolymerization

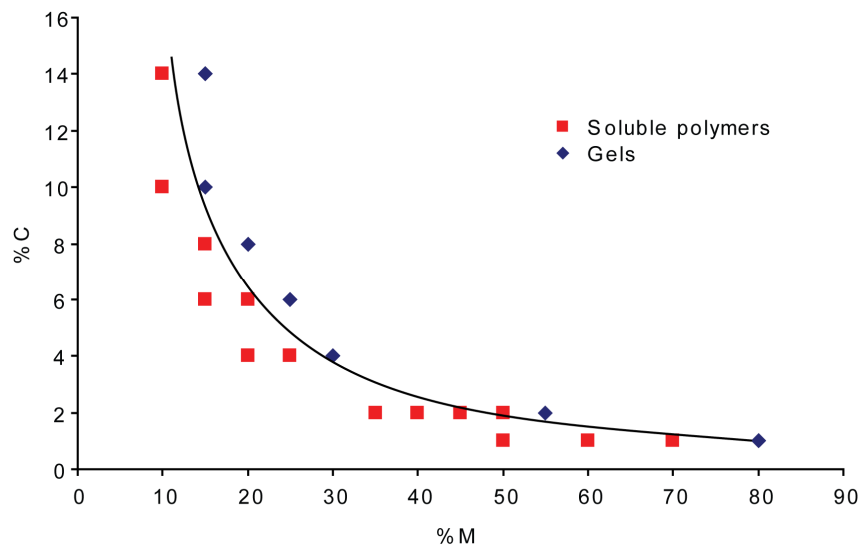
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**API.** Domain diagrams for SLP copolymerization systems

*MMA-BAM system*

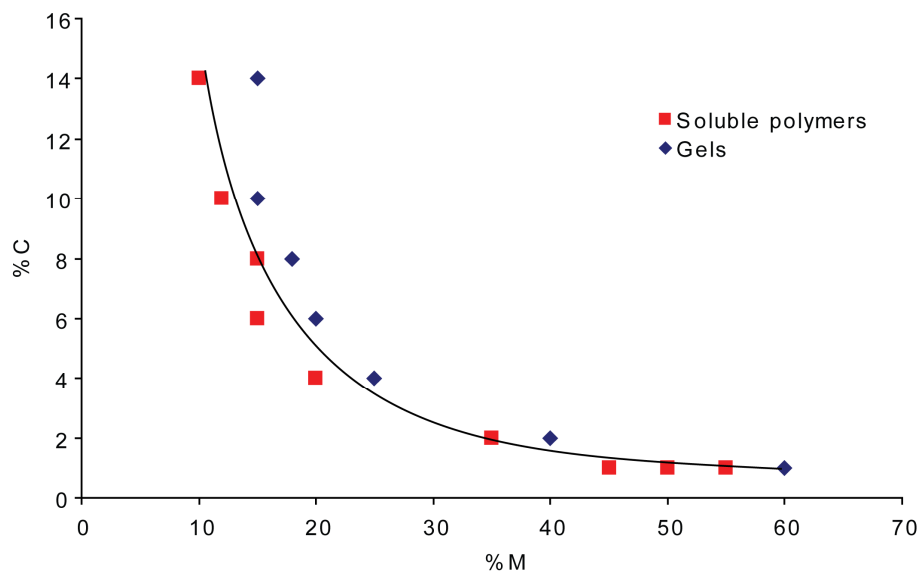


**Figure S1.1.** Domain diagram of the MMA-BAM system.

**Table S1.1.** Monomer conversion and GPC-MALLS data for the MMA-BAM system.

%C	%M	$M_w$ (kDa)	PDI ( $M_w / M_n$ )	% Conversion	
				MMA	%TSC
1	50	205	4.6	91.7	46.7
1	60	312	11.7	85.9	52.6
1	70	168	7.4	80.4	57.5
2	35	197	4.4	71.1	25.7
2	40	133	5.0	57.1	23.8
2	45	1414	13.5	72.6	33.6
2	50	2040	7.5	80.1	41.1
4	20	94	2.4	74.1	15.4
4	25	148	3.5	59.5	15.7
6	15	112	2.7	54.8	8.9
6	20	1131	5.4	63.6	13.5
8	15	430	5.6	66.2	10.6
10	10	57	1.8	46.7	5.3
14	10	63	1.4	26.4	3.8

*MMA-BMOB system*

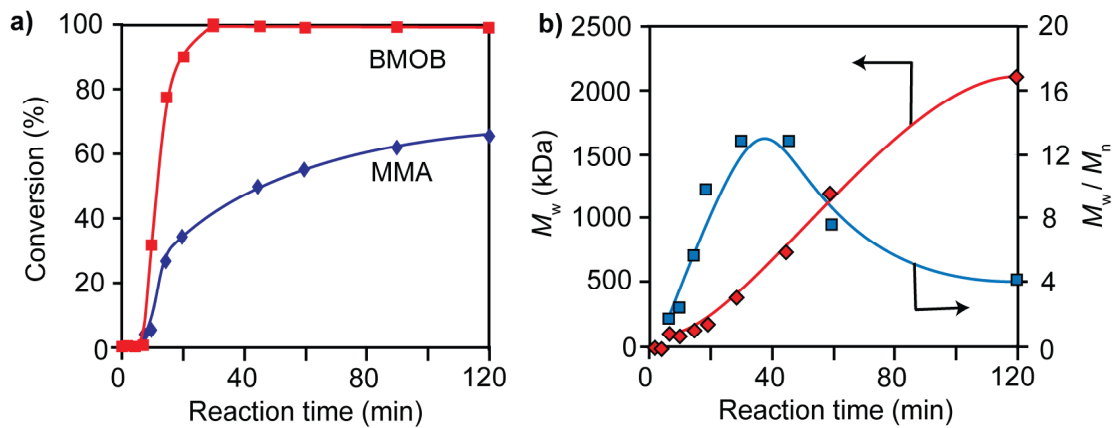


**Figure S1.2.** Domain diagram of the MMA-BMOB system.

**Table S1.2.** Monomer conversion and GPC-MALLS data for the MMA-BMOB system.

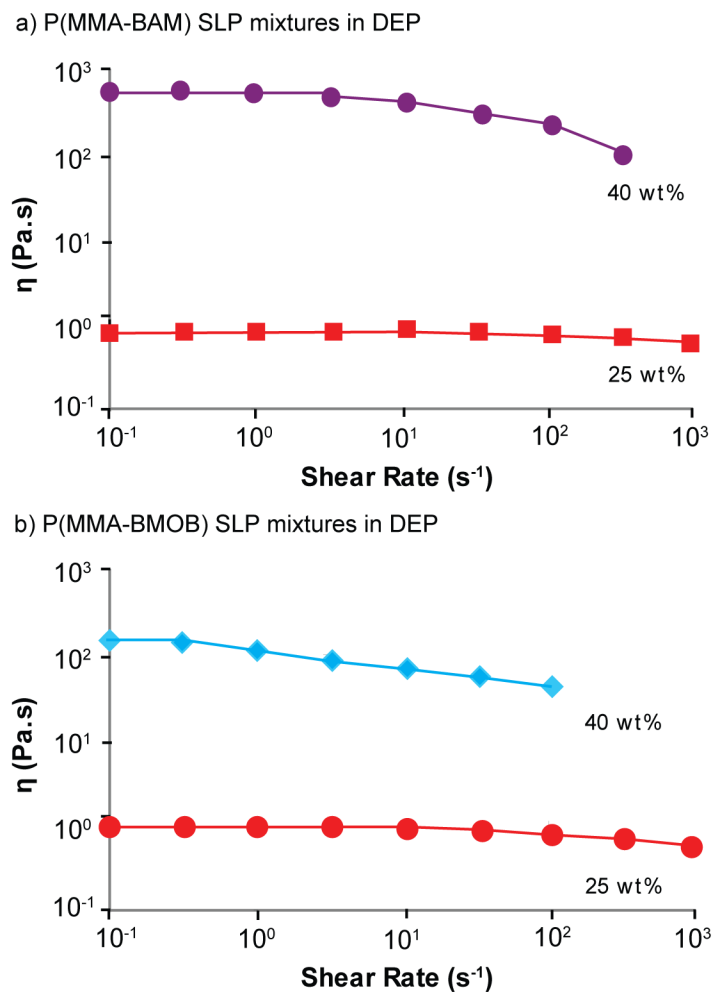
%C	%M	$M_w$	PDI	% Conversion	%TSC
		(kDa)	( $M_w / M_n$ )	MMA	
1	45	165	5.0	70.8	32.7
1	50	614	5.0	68.8	35.4
1	55	-	-	73.3	41.4
2	35	653	4.3	59.4	21.6
4	20	222	5.5	44.1	9.6
6	15	267	4.3	47.9	7.9
8	15	629	6.4	57.2	9.3
10	12	624	3.0	49.0	6.7
14	10	2339	12.3	53.4	6.1

**AP2.** (a) Conversion and (b) molecular weight data for MMA-BMOB copolymerization.



**Figure S2.1.** Data from the kinetic study of MMA-BMOB copolymerization at a formulation of 2 %C, 25 %M (100 °C in toluene); (a) BMOB and MMA conversions and (b) variation in  $M_w$  and PDI with reaction time.

**AP3.** Steady-shear viscosity profiles for P(MMA-BAM) and P(MMA-BMOB) SLP mixtures in DEP.



**Figure S3.1.** Steady-shear profiles for (a) P(MMA-BAM) and (b) P(MMA-BMOB) SLP mixtures in DEP. ARES measurements were conducted at  $25 \pm 0.05$  °C with 50 mm parallel plates and a nominal gap height of 1 mm.

AP4. (a)  $^1\text{H}$  and (b)  $^{13}\text{C}$  NMR spectra ( $\text{CDCl}_3$ ) for BMOB.

