



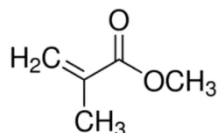
RAFT-MMA-100-1-1-70°C-B2

Recipe

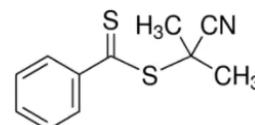
Role	Reactant	Feed ratio	Mole/mmo	Weight	Volume
Monomer	MMA (FW: 100.12, d: 0.936)	100	100.00	10.01 g	10.70 ml
RAFT CTA	CPB (FW: 221.34, d: 1.146)	1	1.00	221.34 mg	193.14 µl
Initiator	AIBN (FW: 164.21, d: 1.1)	1	1.00	164.21 mg	
Solvent	Toluene (FW: 72.11, d: 0.81)	9.11 ml(total)			9.11 ml

[M]/M					
5.00					

MMA: Methyl methacrylate



CTA: 2-Cyano-2-propyl benzodithioate



Sequence of addition: 1. Toluene; 2. CTA; 3. AIBN; 4. MMA

Procedure:

1. Preheat an oil bath to 70 °C.
2. Toluene, CTA, AIBN and MMA were added into the flask (100ml). **TAKE 0h SAMPLE**
3. This solution was bubbled with Ar for 15 min.
4. The flask was immersed in the preheated oil bath at 70 °C. Keep stirred at 500 r.p.m.
5. Take 1ml sample at regular intervals for analysis.

GPC and NMR results (150 µl-DMF GPC, 200 µl-CDCl₃ NMR)

Time	M _n	M _w	PDI	Conv _{NMR} /%	M _{n,th}
30M	1980	2450	1.237	10.71	1072
1H30M	4215	5066	1.202	41.76	4181
3H	6712	7922	1.18	76.06	7615
4H30M	7900	9676	1.225		



5H38M	8652	10254	1.185	96.55	9667
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