

Supporting information

Bimodal/broad polyethylene prepared in a disentangled state

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Table S1 and Table S2 list the data of isothermal crystallization of the synthesized polymers.

Table S1 Kinetic Parameters of Avrami and Tobin Models for the polymers synthesized at different polymerization time.

T _c (°C)	Avrami		R ²	K _t (min ⁻¹)	Tobin		
	K _a (min ⁻¹)	n _a			n _t	R ²	t _{1/2}
10min							
118	2.9472	1.6089	0.9969	3.8332	2.2269	0.9999	0.2630
120	2.2399	1.5124	0.9961	2.9623	2.1022	0.9999	0.3390
122	1.1858	1.3654	0.9982	1.6112	1.8777	0.9994	0.6320
20min							
118	3.9576	1.7054	0.9951	5.0783	2.3718	0.9999	0.1965
120	2.9304	1.5493	0.9945	3.8538	2.1682	0.9999	0.2585
122	1.6888	1.3328	0.9954	2.3159	1.8659	0.9999	0.4315
30min							
118	3.6088	1.5306	0.9938	4.7623	2.1481	0.9997	0.2085
120	2.7098	1.4534	0.9924	3.6289	2.0503	0.9994	0.2715
122	1.3569	1.2072	0.9953	1.9203	1.6901	0.9998	0.5220
60min							
118	3.2606	1.6469	0.9973	4.2140	2.2725	0.9999	0.2390
120	2.8844	1.6009	0.9961	3.7575	2.2251	0.9999	0.2665
122	1.6465	1.3728	0.9978	2.2349	1.9023	0.9997	0.4530

Table S2 Kinetic Parameters of Avrami and Tobin Models for the polymers synthesized at different polymerization temperature and solution.

T _c (°C)	Avrami		R ²	K _t (min ⁻¹)	Tobin		
	K _a (min ⁻¹)	n _a			n _t	R ²	t _{1/2}
0°C							
118	2.7994	1.4256	0.9943	3.7667	1.9992	0.9999	0.2645
120	2.0299	1.3088	0.9925	2.8023	1.8451	0.9995	0.3515
122	1.2209	1.1874	0.9927	1.7387	1.6786	0.9995	0.5665
15°C							
118	3.6532	1.6228	0.9936	5.0088	2.2722	0.9997	0.1980
120	2.7639	1.4767	0.9932	3.6835	2.0779	0.9997	0.2690
122	1.6751	1.3459	0.9939	2.2919	1.8937	0.9998	0.4330
30°C							
118	3.6087	1.5306	0.9938	4.7623	2.1481	0.9997	0.2085
120	2.7098	1.4534	0.9920	3.6289	2.0503	0.9994	0.2715
122	1.3570	1.2072	0.9953	1.9203	1.6901	0.9998	0.4620
30°C Toluene							
118	3.4911	1.7613	0.9968	4.4409	2.4284	0.9999	0.2260
120	3.1645	1.6173	0.9958	4.1126	2.2492	0.9999	0.2430
122	2.0780	1.4211	0.9964	2.7954	1.9805	0.9999	0.3590
45°C							
118	3.5214	1.6273	0.9979	4.6035	2.2399	0.9998	0.2150
120	2.6055	1.5383	0.9967	3.4286	2.1331	0.9999	0.2830
122	1.6465	1.3728	0.9978	2.2349	1.9023	0.9997	0.4530