Crystallization of Long-Spaced Precision Polyacetals III: Polymorphism and Crystallization Kinetics of Even Polyacetals Spaced by 6 to 26 Methylenes

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Supporting Information

Table SI.1: Level of crystallinity, long period, crystal thickness, and equilibrium melting temperature data for even polyacetals.

Sample	Crystal Type	T (°C) [a]	X_c [b]	$L = 2\pi/q$ (Å) [c]	l_c (Å) [d]	T_m° (°C) [e]
PA-6	Hexagonal + Form I	-10	0.363	102	38	32
	Hexagonal + Form I	0	0.389	105	38	32
	Hexagonal + Form I	10	0.381	112	41	32
	Form I	20	0.349	146	49	32
PA-12	Hexagonal + Form I	0	0.453	84.1	-	65.5
	Hexagonal + Form I	25	0.438	88.3	33.5	65.5
	Form I	50	0.536	94	51	65.5
	Form II	60	0.533	110	59	71.5
PA-18	Disordered	0	-	83.3	42.3	78
	Hexagonal	50	0.571	94.0	57.3	78
	Form I	67	0.662	113	67	78
	Form II	77	0.657	138	93	85.3
PA-26	Disordered	0	-	73.9	-	85.5
	Hexagonal	70	0.563	105	55	85.5
	Form I	75	0.657	136	94	85.5
	Form II	80	0.655	167	101	95

[a] Crystallization or quenching temperature, [b] Level of crystallinity estimated from WAXD, [c] long period from Lorentz-corrected SAXS data, [d] lamellar thickness from the normalized one-dimensional correlation function, [e] Equilibrium melting temperature.