

Table 1: Crystallinity(χ_c) and thermal stability of components in PCL/PLA blends

Sample	DSC		T_{mPCL} (°C)	TGA	WAXS		R(%)
	χ_{PCL} (%)	χ_{PLA} (%)		T_{dPCL} (°C)	χ_{PCL} (%)	χ_{PLA} (%)	
0%	17.8	6.13	60.2		27.65	4.81	9.48
25%	21.6	4.77	60.3		31.95	6.41	5.42
50%	24.1	4.87	61.1		34.00	7.84	5.81
75%	23.3	5.60	59.2		31.00	7.21	8.68
100%	28.6	4.43	63.4		33.20	4.56	9.34
125%	28.8	5.17	62.0		30.09	6.96	7.98

χ_c calculated using Δ_m^c of PCL of $139.5(\text{J} \cdot \text{g}^{-1})$, Δ_m^c of PLA of $79(\text{J} \cdot \text{g}^{-1})$.

In MDI jade, R is the *residual errors of fit* when crystallinity was calculated and required $\leq 10\%$.

Table 2: SAXS analysis of PCL/PLA blends

Sample	$q(\text{nm}^{-1})$	Lamllar width(nm)	Herman factor
0%	0.3663	17.15	0.2841
25%	0.3948	15.91	0.2323
50%	0.3948	15.91	0.2709
75%	0.3995	15.72	0.3236
100%	0.3901	16.10	0.4562
125%	0.3922	16.02	0.5971

Table 3: Dynamic properties of the PCL/PLA blends

Sample	Young's Modulus(Mpa)	Tensile Strength(Mpa)	Elongation at break(%)
0%	3799	12.14	13.26
25%	4165	12.67	9.910
50%	4880	17.37	11.03
75%	6124	17.60	10.95
100%	7499	20.21	10.59
125%	5730	20.10	7.667