

# PL04005E

Bioplastic compound resin

**Special Characteristics :** PlastMate PL04005E is the compostable bioplastic compound resin which is designed for good processability, easy to process while balancing the stiffness and toughness properties. It is suitable with extrusion process.

**Typical Applications :** Applicable for producing compostable bio-straws, bendable bio-straws with various straw diameters.

**Typical Properties :**

Properties	PL04005E	Unit	Test Method
<b>Physical Properties</b>			
Melt Flow Rate 210°C, 2.16 kg	3.5	g/10 min	ASTM D1238
Density	1.31	g/cm <sup>3</sup>	ASTM D792
<b>Mechanical Properties (Film Specimens)</b>			
Tensile Strength	40 (MD)	MPa	ASTM D882
	35 (TD)	MPa	ASTM D882
Tensile Modulus	1,400 (MD)	MPa	ASTM D882
	1500 (TD)	MPa	ASTM D882
Elongation at Break	240 (MD)	%	ASTM D882
	140 (TD)	%	ASTM D882

\*Remark

Film sample thickness 35 micron, BUR = 2.5 (For machine testing), MD = Machine direction and TD = Transverse direction

**Recommendation :**

Die Temperature: 170-190 °C

Extruder Temperature: 180-200 °C

**FDA Statement :**

Food and Drug Administration US FDA 21 CFR 177.1520. More compliance regulations and standards that related to the product shall contact in details.

**Compostable Statement :**

The raw materials for manufacturing which are certified to European Compost Standard EN13432 : 2000, requirements for packaging recoverable through composting and biodegradation.