



Revised Date : October 2022

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
Physical Properties			
Melt Flow Rate 210°C, 2.16 kg	3.5	g/10 min	ASTM D1238
Density	1.31	g/cm3	ASTM D792
Mechanical Properties (Film Specimens)			
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.

Disclaimer: To the best of our knowledge, the information contained herein is accurate and reliable as of the date of publication; however, we do not assume any liability what so ever for the accuracy and completeness of such information. We make no warranties which extend beyond the description contained herein. Nothing herein shall constitute any implied warranty of merchantability or fitness for a particular purpose. It is the customer's responsibility to inspect and test our products in order to satisfy itself as to the suitability of the products for the customer's particular purpose. The customer is responsible for the appropriate, safe and legal use, processing and handling of our products. No liability can be accepted in respect of the use of our products in conjunction with other materials. The information contained herein relates exclusively to our products when not used in conjunction with any third party materials.

Note: Properties reported here are typical values of the product, not to be considered as specifications. GC makes no representations as to the accuracy or completeness of the information contained herein.