SECTION 1: PRODUCT DESCRIPTION

FC 60140 is a pellet blend comprising FC 60025 and FC 45140, products based on PLA and PBAT composites, respectively, are intended for use as bioplastic straw raw material. Product suitable for profile extrusion.

SECTION 2: PHYSICAL PROPERTIES & GUIDELINES

FC 60140 is supplied as mixture of beige and off-white pellets. Temperatures during transportation and storage may not exceed 50 °C. Storage time of unopened bags may not surpass 24 months at room temperature. Drying prior to processing is essential. A moisture content less than 100 ppm is recommended to prevent viscosity degradation. The property values listed below should be viewed as guidelines only and may vary based on processing conditions. No warranties of any kind, either expressed or implied are made regarding products described or regarding designs, data or information set forth. Process temperatures must not exceed 230 °C.

Drying: dry the material for 4 – 6 hours at 80 °C.

Profile extrusion process

	Setting, ºF*	Setting, ºC*
Feed Throat	75	24
Feed Section	293 – 311	145 – 155
Zone 1	311 – 338	155 – 170
Zone 2	311 – 338	155 – 170
Zone 3	311 – 338	155 – 170
Zone 4	311 – 338	155 – 170
Die	329 – 347	165 – 175
Screw Speed	40 – 100 ppm	

*These settings are intended as a starting point. Optimization may be required.

Physical Properties	Test Method	Value
Melt Flow Rate (190 °C, 2.16 kg)	ASTM D1238:20	2.0 – 3.5 g/10 min
Appearance	-	Beige and Off-white pellets

Mechanical Properties	Test Method	Value
Tensile Strength*	ASTM D638:22	65 – 71 MPa
Elongation at break*	ASTM D638:22	< 25%
Notched Izod Impact Strength	ASTM D256:10	75 – 95 J/m

*Data obtained from injected standard test bars (Type I).

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