


Code	PRO_TDS_08	PRO TECHNICAL DATA SHEET TDS	
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SECTION 1: PRODUCT DESCRIPTION

FC 45140 is a product made with PLA and PBAT composite for application as flexible films, such as bags, flexible packaging in general, and paper coating. Product suitable for blown film extrusion, cast film extrusion and paper coating processes.

SECTION 2: PHYSICAL PROPERTIES & GUIDELINES


FC 45140 is supplied as beige 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.

Blown film extrusion process

	Setting, °F*	Setting, °C*
Feed Throat	70	21
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.

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Coating process

	Setting, °F*	Setting, °C*
Feed Throat	70	21
Feed Section	350-375	177-191
Zone 1	375-395	191-200
Zone 2	375-395	191-200
Zone 3	375-395	191-200
Zone 4	375-395	191-200
Die	395-410	200-210
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 – 5 g/10 min
Density	ASTM D792:20	1.42 g/cm ³
Appearance	-	Beige

Mechanical Properties	Test Method	Value
Tensile Strength*	ASTM D882:18	TD: > 12 MPa
		MD: > 12 MPa
Elongation at break*	ASTM D882:18	TD: > 210 %
		MD: > 180 %
Tear resistance*	ASTM D624:20	> 80 kN/m
Notched Izod Impact Strength**	ASTM D256:10	> 250 J/m

*Data obtained from films.

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

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