


Code	PRO_TDS_04	PRO <b>TECHNICAL DATA SHEET</b> TDS	
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## **SECTION 1: PRODUCT DESCRIPTION**

FC 20040 is made with natural filler package developed for manufacturing thermoforming.


## **SECTION 2: PHYSICAL PROPERTIES & GUIDELINES FOR USE**

FC 20040 is supplied as 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 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. In order to achieve high Heat Deflection Temperatures, hot molding or annealing of the part is required.

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

	Settings, °F*	Settings, °C*
<b>Feed Throat</b>	70	21
<b>Feed Section</b>	260-300	130-150
<b>Zone 1</b>	375-395	191-200
<b>Zone 2</b>	375-395	191-200
<b>Zone 3</b>	375-395	191-200
<b>Zone 4</b>	375-395	191-200
<b>Hot Runner</b>	395-410	200-210
<b>Nozzle</b>	395-410	200-210
<b>Screw Speed</b>	40 – 100rpm	

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

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Physical Properties*	Test Method	Value
Melt Flow Rate (190°C, 2.16 kg)	ASTM D1238:2013	4 - 7 g/10 min
		Axial: 0.54%
Molding Shrinkage	ASTM D955	Lateral: 1.7%
		Axial: 1.0%*
		Lateral: 2.5%*

Mechanical Properties*	Test Method	Value
Tensile Strength	ASTM D638:2014	21 MPa 20 MPa*
Elongation at Break	ASTM D638:2014	100% 128%*
Flexural Modulus	ASTM D790:2017	3120 MPa 2450 MPa*
Notched Izod Impact Strength	ASTM D256:10(2018)	249 J/m 251 J/m*
HDT (before crystallization)	ISO 75-1/-2	70°C
HDT (after crystallization)	ISO 75-1/-2	120°C

\*Data obtained from hot molded ASTM standard test bars. Results obtained at 100% add in.

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