

**Integra™ PC-5020 F1 001**

PolySource, LLC - Polycarbonate

**General Information**
**Product Description**

Polycarbonate, Mold Release, UV Stabilized, f1 Rated, Clear

**General**

Material Status	• Commercial: Active
Availability	• North America
Additive	• Mold Release • UV Stabilizer
Features	• UV Stabilized
Appearance	• Clear/Transparent

**Properties <sup>1</sup>**

	Nominal Value	Unit	Test Method
<b>Physical</b>			
Density / Specific Gravity	1.20		ASTM D792
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)	23	g/10 min	ASTM D1238
Water Absorption (24 hr, 73°F)	0.15	%	ASTM D570
Outdoor Suitability	f1		UL 746C
<b>Mechanical</b>			
<b>Nominal Value Unit Test Method</b>			
Tensile Strength (Yield, 73°F)	9280	psi	ASTM D638
Tensile Elongation (Break)	90	%	ASTM D638
Flexural Modulus (73°F)	284000	psi	ASTM D790
Flexural Strength (Yield, 73°F)	12500	psi	ASTM D790
<b>Impact</b>			
<b>Nominal Value Unit Test Method</b>			
Notched Izod Impact (73°F)	14	ft·lb/in	ASTM D256
<b>Thermal</b>			
<b>Nominal Value Unit Test Method</b>			
Deflection Temperature Under Load (264 psi, Unannealed, 0.250 in)	266	°F	ASTM D648
<b>Electrical</b>			
<b>Nominal Value Unit Test Method</b>			
Volume Resistivity	4.0E+16	ohms·cm	ASTM D257
Dielectric Strength	760	V/mil	ASTM D149
Arc Resistance	120	sec	ASTM D495
<b>Flammability</b>			
<b>Nominal Value Unit Test Method</b>			
Flame Rating (0.06 in)	V-2		UL 94
<b>Optical</b>			
<b>Nominal Value Unit Test Method</b>			
Haze	0.400	%	ASTM D1003

**Processing Information**

	Nominal Value	Unit
<b>Injection</b>		
Drying Temperature	248	°F
Drying Time	3.0 to 5.0	hr
Suggested Max Moisture	0.20	%
Rear Temperature	455 to 500	°F
Middle Temperature	482 to 527	°F
Front Temperature	509 to 554	°F
Nozzle Temperature	509 to 572	°F
Processing (Melt) Temp	509 to 572	°F
Mold Temperature	149 to 221	°F
Back Pressure	36.3 to 102	psi
Screw Speed	40 to 70	rpm
Vent Depth	7.9E-4 to 3.1E-3	in

