

**Integra™ PC 5020 F1 CL-0001**

PolySource, LLC - Polycarbonate

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

PC, High Flow, Mold Release, UV-Stablized, Clear

**General**

Material Status	• Commercial: Active
Availability	• North America
Additive	• UV Stabilizer
Features	• Good Mold Release • High Flow • UV Stabilized
Appearance	• Clear/Transparent
Processing Method	• Injection Molding

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

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.20		ASTM D792
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)	25 g/10 min		ASTM D1238
Molding Shrinkage - Flow (0.126 in)	5.0E-3 to 7.0E-3	in/in	Internal Method
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	344000	psi	ASTM D638
Tensile Strength (Yield)	9000	psi	ASTM D638
Tensile Strength (Break)	9500	psi	ASTM D638
Tensile Elongation (Yield)	6.0	%	ASTM D638
Tensile Elongation (Break)	110	%	ASTM D638
Flexural Modulus (1.97 in Span)	335000	psi	ASTM D790
Flexural Strength (Yield, 1.97 in Span)	13500	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F)	12	ft·lb/in	ASTM D256
Instrumented Dart Impact (73°F, Peak Load)	480	in·lb	ASTM D3763
Tensile Impact Strength	180	ft·lb/in <sup>2</sup>	ASTM D1822
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed, 0.252 in)	260	°F	ASTM D648
Optical	Nominal Value	Unit	Test Method
Light Transmittance (100.0 mil)	88.0	%	ASTM D1003
Haze (100.0 mil)	1.00	%	ASTM D1003

**Processing Information**

Injection	Nominal Value	Unit
Drying Temperature	248	°F
Drying Time	3.0 to 5.0	hr
Suggested Max Moisture	0.020	%
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

