

**Integra™ PC-5022 F1 FRA**  
 PolySource, LLC - Polycarbonate

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

Polycarbonate, Flame Retardant, Medium Viscosity, Release, UV Stabilized, f1

**General**

Material Status	• Commercial: Active
Availability	• North America
Additive	• Mold Release • UV Stabilizer
Features	• Flame Retardant • Medium Viscosity • UV Stabilized
Processing Method	• Injection Molding

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

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.23		ASTM D792
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)	15	g/10 min	ASTM D1238
Molding Shrinkage - Flow	4.0E-3 to 7.0E-3	in/in	Internal Method
Water Absorption (24 hr, 73°F)	0.18	%	ASTM D570
Outdoor Suitability	f1		UL 746C
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Yield, 73°F)	8500	psi	ASTM D638
Tensile Elongation (Break)	75	%	ASTM D638
Flexural Modulus (73°F)	310000	psi	ASTM D790
Flexural Strength (Yield, 73°F)	12500	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F, 0.125 in)	11	ft·lb/in	ASTM D256
Tensile Impact Strength (0.125 in)	211	ft·lb/in <sup>2</sup>	ASTM D1822
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	273	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	257	°F	ISO 75-2/A
Flammability	Nominal Value	Unit	Test Method
Flame Rating			UL 94
0.06 in		V-0	
0.10 in, BK, GY, BG		5VA	

**Processing Information**

Injection	Nominal Value	Unit
Drying Temperature	250	°F
Drying Time	4.0	hr
Rear Temperature	489 to 525	°F
Middle Temperature	511 to 531	°F
Front Temperature	531 to 559	°F
Nozzle Temperature	520 to 559	°F
Processing (Melt) Temp	540 to 579	°F
Mold Temperature	160 to 200	°F
Injection Pressure	11000 to 18000	psi
Back Pressure	50.0 to 200	psi

