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INTEGRA™ PC-5022 F1 UR 0001

Polycarbonate, Mold Release, UV, f1 Rated, Clear

Physical	Test Method	Value	Units
Specific Gravity	ASTM D792	1.20	-
Melt Flow Rate (300°C/1.2 kg)	ASTM D1238	18	g/10 min
Water Absorption, equilibrium (73°F)	ASTM D570	0.35	%
Mold Shrinkage - Flow (0.125")	Internal	0.5 - 0.7	%
Mechanical	Test Method	Value	Units
Tensile Modulus	ASTM D638	345,000	psi
Tensile Strength, yield	ASTM D638	9,000	psi
Tensile Strength, break	ASTM D638	9,500	psi
Tensile Elongation, yield	ASTM D638	6	%
Tensile Elongation, break	ASTM D638	100	%
Flexural Stress, yield (0.05 in/min, 2 in span)	ASTM D790	13,400	psi
Flexural Modulus (0.05 in/min, 2 in span)	ASTM D790	340,000	psi
Izod Impact, unnotched (73°F)	ASTM D256	60.0	ft·lb/in
Izod Impact, notched (73°F)	ASTM D256	13.0	ft·lb/in
Thermal	Test Method	Value	Units
Heat Deflection Temperature, (66 psi, 0.250")	ASTM D648	279	°F
Heat Deflection Temperature, (264 psi, 0.250")	ASTM D648	269	°F
CTE, flow (-40°F to 200°F)	ASTM E831	0.000038	1/°F
CTE, xflow (-40°F to 200°F)	ASTM E831	0.000038	1/°F
Recommended Processing Parameters	Test Method	Value	Units
Drying Temperature		250	°F
Drying Time		3 - 4	hrs
Suggested Max Moisture		0.02	%
Melt Temperature		535 - 580	°F
Nozzle Temperature		527 - 572	°F
Front Zone Temperature		535 - 580	°F
Middle Zone Temperature		520 - 565	°F
Rear Zone Temperature		500 - 535	°F
Mold Temperature		160 - 200	°F
Back Pressure		45 - 100	psi
Screw Speed		40 - 70	rpm

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The test values reported are typical and should be considered averages. However, due to varying processing methods and equipment conditions, no guarantees or warranties are expressed or implied, including expressions of fitness for purpose or merchantability. Samples of our products are available for inspection and testing and each buyer is responsible for conducting its own tests to determine the product's fitness for its intended use. PolySource, LLC in no event, will be held liable for any loss or damage that may arise as a result of the use or application of the product or information provided.