

Integra™ PC-5022 R UV 0001

PolySource, LLC - Polycarbonate

General Information

Product Description

PC, 17.5MFI, Mold Release, UV, Clear

General

Material Status	• Commercial: Active
Availability	• North America
Features	• Good Mold Release • UV Resistant
Appearance	• Clear/Transparent

 Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.20		ASTM D792
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)	18	g/10 min	ASTM D1238
Molding Shrinkage - Flow (0.125 in)	5.0E-3 to 7.0E-3	in/in	Internal Method
Water Absorption (Equilibrium, 73°F)	0.35	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	345000	psi	ASTM D638
Tensile Strength (Yield)	8900	psi	ASTM D638
Tensile Strength (Break)	9400	psi	ASTM D638
Tensile Elongation (Yield)	7.0	%	ASTM D638
Tensile Elongation (Break)	110	%	ASTM D638
Flexural Modulus ² (2.00 in Span)	339000	psi	ASTM D790
Flexural Strength ² (Yield, 2.00 in Span)	13400	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F)	13	ft·lb/in	ASTM D3763
Unnotched Izod Impact (73°F)	60	ft·lb/in	ASTM D4812
Tensile Impact Strength ³	260	ft·lb/in ²	ASTM D1822
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed, 0.250 in)	279	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed, 0.250 in)	269	°F	ASTM D648
CLTE - Flow (-40 to 200°F)	3.8E-5	in/in/°F	ASTM E831
CLTE - Transverse (-40 to 200°F)	3.8E-5	in/in/°F	ASTM E831

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	250	°F
Drying Time	3.0 to 4.0	hr
Suggested Max Moisture	0.020	%
Rear Temperature	500 to 535	°F
Middle Temperature	520 to 565	°F
Front Temperature	535 to 580	°F
Nozzle Temperature	527 to 572	°F
Processing (Melt) Temp	535 to 580	°F
Mold Temperature	160 to 200	°F
Back Pressure	45.0 to 100	psi
Screw Speed	40 to 70	rpm

