

Trirex PC 3020U

Polycarbonate



Product Description

Polycarbonate resin grade which has a high low temperature impact strength in combination with superior mechanical and physical property.

General

Material Status	*Commercial: Active		
Features	*Good Dimensional Stability	*Good UV Resistance	*Low Temp. Impact Resistance
	*Good Electrical Properties	*Good Weather Resistance	*Low Viscosity
	*Good Flow	*Low Moisture Absorption	
Uses	*Appliances	*Electrical/Electronic Applications	
	*Automotive Applications	*Optical Applications	

Physical	Nominal Value	Test Method
Specific Gravity	1.20	ASTM D792
Melt Flow Rate (300°C / 1.2 kg)	23 g/10 min	ASTMD 1238
Water Absorption (73°F, 24 hr)	0.15%	ASTM D570

Mechanical	Nominal Value	Test Method
Tensile Strength (Yield)	9,280 psi	ASTM D638
Tensile Elongation (Break)	90%	ASTM D638
Flexural Modulus	284,000 psi	ASTM D790
Flexural Strength (Yield)	12,500 psi	ASTM D790

Impact	Nominal Value	Test Method
Notched Izod Impact (73°F, 24 hr)	14 ft-lb/in	ASTM D256

Thermal	Nominal Value	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	266°F	ASTM D648
CLTE - Flow	0.000028 to 0.000039 in/in °F	ASTM D696

Electrical	Nominal Value	Test Method
Volume Resistivity	4.0E+16 ohm cm	ASTM D257
Dielectric Strength	760 V/mil	ASTM D149
Arc Resistance	120 sec	ASTM D495

Flammability	Nominal Value	Test Method
Flame Rating - (UL) 0.0625 in	V-2	UL 94

Optical	Nominal Value	Test Method
Haze	0.40%	ASTM D1003

Injection	Nominal Value
Drying Temperature	248° F
Drying Time	3 - 5 hours
Suggested Max Moisture	0.020%
Rear Temperature	455 - 500° F
Middle Temperature	482 - 527° F
Front Temperature	509 - 554° F
Nozzle Temperature	509 - 572° F
Processing (Melt) Temperature	509 - 572° F
Mold Temperature	149 - 221° F
Back Pressure	36.3 - 102 psi
Screw Speed	40 - 70 rpm
Vent Depth	0.00079 - 0.0031 in

Notes

¹Typical properties: these are not to be construed as specifications

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.