TRIREX® 3027U(H)

Polycarbonate

Samyang Corporation

Message:

TRIREX is the registered trademark of polycarbonate resin manufactured by Samyang Corporation. TRIREX polycarbonate resins offer superior mechanical properties, good dimensional stability and high electrical performance, which allows it to be widely used for electrical, electronic, appliance, automotive and optical industries. TRIREX 3027U(H) is a polycarbonate resin grade which has high low temperature impact strength in combination with superior mechanical and physical property.

Characteristics: Superior low temperature impact resistance Good flow-ability Workable under a wide range of temperatures (-100 °C ~ 135 °C) High electrical performance Good dimensional stability Low moisture absorbency Good weather resistance Applications:

TRIREX 3027U(H) resin grade is used for Injection molding components. UV stabilized. Medium high viscosity. Transparent colors only.

Additive UV Stabilizer Features Good Dimensional Stability Good Electrical Properties Good Flow Good Flow Good Weather Resistance Low Moisture Absorption Low Temperature Impact Resistance Medium Viscosity Medium Viscosity Uses Appliances Automotive Applications Electrical/Electronic Applications Electrical/Electronic Applications Optical Applications Processing Method Injection Molding Physical Nominal Value Unit					
Good Electrical PropertiesGood FlowGood Weather ResistanceLow Moisture AbsorptionLow Temperature Impact ResistanceMedium ViscosityUsesAppliancesAutomotive ApplicationsElectrical/Electronic ApplicationsOptical ApplicationsOptical ApplicationsProcessing MethodInjection Molding					
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Appearance Clear/Transparent Processing Method Injection Molding	Electrical/Electronic Applications				
Processing Method Injection Molding	Optical Applications				
Processing Method Injection Molding					
	Clear/Transparent				
Physical Nominal Value Unit	Injection Molding				
	Test Method				
Specific Gravity 1.20 g/cm ³	ASTM D792				
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)8.0g/10 min	ASTM D1238				
Water Absorption (24 hr)0.15%	ASTM D570				
Mechanical Nominal Value Unit	Test Method				
Tensile Strength (Yield)70.6MPa					
Tensile Elongation (Break)120%	ASTM D638				
Flexural Modulus 2060 MPa	ASTM D638 ASTM D638				

Hexard Strength Yield)88.3MPaASTM D790InpactNorinal ValueUnitText MethodNotched Izod Impact (23°C, 3.18 mm)80//mASTM D256TermanNorinal ValueUnitText MethodDeflecting Temperatur Under Lood (18) MPa, Unanneled)12'cASTM D256CLT - Floor50-55 7.05-5cn/cm/°CASTM D267ElecticalNorinal ValueUnitText MethodDeflectir: Strongth4.05+16ohms ·cmASTM D257Delectir: Strongth4.05+16ohms ·cmASTM D257Delectir: Strongth4.05+16ohms ·cmASTM D257Delectir: Strongth4.05+16ohms ·cmASTM D495Delectir: Strongth4.05+16ohms ·cmASTM D495Delectir: Strongth10VolumeText MethodArc Resistance10VolumeText MethodPinternaNorinal ValueVolumeText MethodDiptoNorinal ValueVolumeText MethodDipto Emperature10SoloSoloDipto Emperature30 to 5.0Norinal ValueVolumeDipto Emperature30 to 5.0Norinal ValueVolumeNorinal CareSolo 5.0Norinal Val				
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ThermalNominal ValueUnitTest MethodDeflection Temperature Under Load (1.8 MPa, Unannealed)132"CASTM D648MPa, Unannealed)50E-S to 7.0E-Scm/cm/"CASTM D696ElectricalNominal ValueUnitTest MethodVolume Resistivity4.0E+16ohms · cmASTM D257Dielectric Strength30kV/mmASTM D495Arc Resistance120secASTM D495FlammabilityNominal ValueUnitTest MethodPlane Rating (1.59 mm)V-2U.94VOpticalNominal ValueUnitTest MethodHaze0.40%ASTM D1033InjectionNominal ValueUnitTest MethodDrying Temperature2.00°C*Suggested Max Moisture2.010 2.75°C*Suggested Max Moisture2.050 0.75°C*Suggested Max Moisture2.050 0.275°C*Nonzel Temperature2.650 0.200°C*Nozzel Temperature2.650 0.200°C*Nozzel Temperature2.650 0.200°C*Mold Temperature6.500 1.05°C*Mold Temperature0.250 to 0.700MPa*Sterw Speed0.0700rpm*	Impact	Nominal Value	Unit	Test Method
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OpticalNominal ValueUnitTest MethodHaze0.40%ASTM D1003InjectionNominal ValueUnitDrying Temperature120°CDrying Time3.0 to 5.0hrSuggested Max Moisture< 0.020	Flammability	Nominal Value	Unit	Test Method
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Drying Time3.0 to 5.0hrSuggested Max Moisture< 0.020	Injection	Nominal Value	Unit	
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Mold Temperature65.0 to 105°CBack Pressure0.250 to 0.700MPaScrew Speed40 to 70rpm	Nozzle Temperature	265 to 300	°C	
Back Pressure0.250 to 0.700MPaScrew Speed40 to 70rpm	Processing (Melt) Temp	265 to 300	°C	
Screw Speed 40 to 70 rpm	Mold Temperature	65.0 to 105	°C	
	Back Pressure	0.250 to 0.700	MPa	
Vent Depth 0.020 to 0.080 mm	Screw Speed	40 to 70	rpm	
	Vent Depth	0.020 to 0.080	mm	

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