

TRIREX® 3025PJ

Samyang Corporation - Polycarbonate

Tuesday, November 5, 2019

General Information

Product Description

- 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 3025PJ is a polycarbonate resin grade which has high low temperature impact strength in combination with superior mechanical and physical property.

CHARACTERISTICS

- · Granule type
- · 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 3025PJ resin grade is designed for compounding
- · Medium viscosity. Transparent colors only.

General			
Material Status	Commercial: Active		
Availability	Asia Pacific	• Europe	North America
Features	Good Dimensional StabilityGood Electrical PropertiesGood Flow	Good Weather ResistanceLow Moisture AbsorptionLow Temperature Impact Resistance	Medium Viscosity
Uses	AppliancesAutomotive Applications	Compounding Electrical/Electronic Application	Optical Applications
Appearance	 Clear/Transparent 		
Forms	 Granules 		
Processing Method	Compounding	Injection Molding	

ASTM & ISO Properties 1					
Physical	Nominal Value	Unit	Test Method		
Density / Specific Gravity	1.20		ASTM D792		
Melt Mass-Flow Rate (300°C/1.2 kg)	9.0	g/10 min	ASTM D1238		
Molding Shrinkage - Flow (0.118 in)	5.0E-3 to 7.0E-3	in/in	ASTM D955		
Water Absorption (24 hr, 73°F)	0.15	%	ASTM D570		
Mechanical	Nominal Value	Unit	Test Method		
Tensile Strength (Yield)	10400	psi	ASTM D638		
Tensile Elongation (Break)	150	%	ASTM D638		
Flexural Modulus	326000	psi	ASTM D790		
Flexural Strength (Yield)	13300	psi	ASTM D790		



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Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F, 0.125 in)	17	ft·lb/in	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			ASTM D648
264 psi, Unannealed	273	°F	
CLTE - Flow	2.8E-5 to 3.9E-5	in/in/°F	ASTM D696
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	4.0E+16	ohms·cm	ASTM D257
Dielectric Strength	760	V/mil	ASTM D149
Arc Resistance	120	sec	ASTM D495
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.06 in)	V-2		UL 94

Processing Information				
Injection	Nominal Value	Unit		
Drying Temperature	248	°F		
Drying Time	3.0 to 5.0	hr		
Suggested Max Moisture	0.020	%		
Rear Temperature	473 to 518	°F		
Middle Temperature	500 to 545	°F		
Front Temperature	527 to 572	°F		
Nozzle Temperature	527 to 590	°F		
Processing (Melt) Temp	527 to 590	°F		
Mold Temperature	149 to 221	°F		
Back Pressure	36.3 to 102	psi		
Screw Speed	40 to 70	rpm		
Vent Depth	7.9E-4 to 3.1E-3	in		

Notes

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