TRIREX 3025G10 GRADE

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 3025G10 is a 10% glass fiber reinforced polycarbonate resin which has a superior dimension stability in combination with good physical property

CHARACTERISTICS

- High dimension stability
- Workable under a wide range of temperatures (-100℃ ~ 135℃)
- High electrical performance
- Corrosion resistance

APPLICATIONS

- TRIREX 3025G10 resin grade is used mainly in electronics and electric applications including connector, drill housing, and deflection yoke etc.

TYPICAL DATA OF TRIREX 3025G10 GRADE

PROPERTY	UNIT	ASTM METHOD	TYPICAL DATA
PHYSICAL			
Specific Gravity	–	D792	1.25
Water Absorption (24 hours at 23℃)	%	D570	0.13
Melt Flow Rate (300℃, 1.2kg)	g/10min	D1238	10
MECHANICAL			
Tensile Strength at yield	kg_f/cm^2	D638	700
Tensile Elongation at break	%	D638	5
Flexural Strength at yield	kg_f/cm^2	D790	1,050
Flexural Modulus	kg_f/cm^2	D790	37,000
Izod Impact Strength, notched, 23℃ (1/8")	kg_f·cm/cm	D256	11
Rockwell Hardness	R scale	D785	121
THERMAL			
HDT, 4.6 kg_f/cm^2	℃	D648	150
HDT, 18.6 kg_f/cm^2	℃	D648	140
Coefficient of Linear Thermal Expansion	mm/mm/℃	D696	$3.3X10^{-5}$
ELECTRICAL			
Volume Resistivity	Ω·cm	D257	$4X10^{16}$
Dielectric Strength	kV/mm	D149	31
Dielectric Constant	–	D150	2.97
Dissipation Factor	–	D150	0.0096
ARC Resistance	sec	D495	120
OTHERS			
UL-94 Flammability (1.5mm thickness)	–	(UL 94)	V-0
Mold Shrinkage (3mm thickness)	%	D955	0.3~0.G

The figures listed in this table are typical values obtained under the standard test methods and may not be applicable for products that are under different application condition.

PROCESSING GUIDE FOR TRIREX 3025G10 GRADE

General processing conditions for TRIREX 3025G10 are shown below. Drying prior to processing is essential to ensure desired appearance and property performance.

SPECIFICATION	UNIT	CONDITIONS
Drying Temperature	℃	120
Drying Time	hr	3~4
Moisture Content, Max	%	
Melt Temperature	℃	310 ~ 330
Nozzle Temperature	℃	300 ~ 320
Front Temperature	℃	300 ~ 320
Middle Temperature	℃	290 ~ 310
Rear Temperature	℃	280~ 300
Mold Temperature	℃	80 ~ 110
Back Pressure	MPa	350~700
Screw Speed	rpm	50~70
Vent Depth	mm	