

TRIEX 3015NF GRADE

DESCRIPTION

- TRIEX is the registered trademark of polycarbonate resin manufactured by Samyang Corporation. TRIEX 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.
- TRIEX 3015NF is a specially designed polycarbonate resin grade which has a flame resistance in combination with superior physical properties

CHARACTERISTICS

- Good flame resistance
- Excellent flow-ability
- Workable under a wide range of temperature ($-100^{\circ}\text{C} \sim 135^{\circ}\text{C}$)
- High electrical performance
- Good dimensional stability
- Low moisture absorbency

APPLICATIONS

- TRIEX 3015NF resin grade is used mainly in electronics and electric applications, including connector, lamps parts, light covers

TYPICAL DATA OF TRIEX 3015NF GRADE

PROPERTY	UNIT	ASTM METHOD	TYPICAL DATA
PHYSICAL			
Specific Gravity	—	D792	1.20
Water Absorption (24 hours at 23°C)	%	D570	0.15
Melt Flow Rate (300°C, 1.2kg)	g/10min	D1238	55
MECHANICAL			
Tensile Strength at yield	kg _f /cm ²	D638	650
Tensile Elongation at break	%	D638	40
Flexural Strength at yield	kg _f /cm ²	D790	900
Flexural Modulus	kg _f /cm ²	D790	27,000
Izod Impact Strength, notched, 23°C (1/8")	kg _f ·cm/cm	D256	10
Rockwell Hardness	R scale	D785	115
THERMAL			
HDT, 4.6 kg _f /cm ²	°C	D648	-
HDT, 18.6 kg _f /cm ²	°C	D648	87
Coefficient of Linear Thermal Expansion	mm/mm/°C	D696	5.5X10 ⁻⁵
ELECTRICAL			
Volume Resistivity	Ω·cm	D257	4X10 ¹⁶
Dielectric Strength	kV/mm	D149	30
Dielectric Constant	—	D150	2.90
Dissipation Factor	—	D150	0.009
ARC Resistance	sec	D495	90
OTHERS			
UL-94 Flammability (0.5mm)	—	(UL 94)	V-0
Mold Shrinkage (3mm thickness)	%	D955	0.5~0.7

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 TRIEX 3015NF GRADE

General processing conditions for TRIEX 3015NF are shown below. Drying prior to processing is essential to ensure desired appearance and property performance.

SPECIFICATION	UNIT	CONDITIONS
Drying Temperature	°C	80
Drying Time	hr	3~5
Moisture Content, Max	%	0.02
Melt Temperature	°C	260 ~ 280
Nozzle Temperature	°C	290 ~ 300
Front Temperature	°C	280 ~ 290
Middle Temperature	°C	260 ~270
Rear Temperature	°C	250 ~ 260
Mold Temperature	°C	80 ~ 100
Back Pressure	MPa	0.3 ~ 0.7
Screw Speed	rpm	40 ~ 70
Vent Depth	mm	0.02 ~ 0.08

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