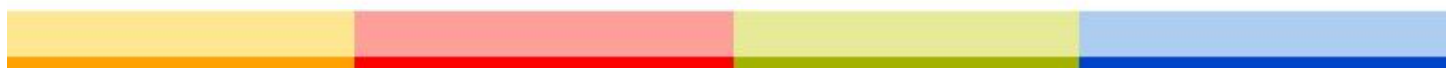
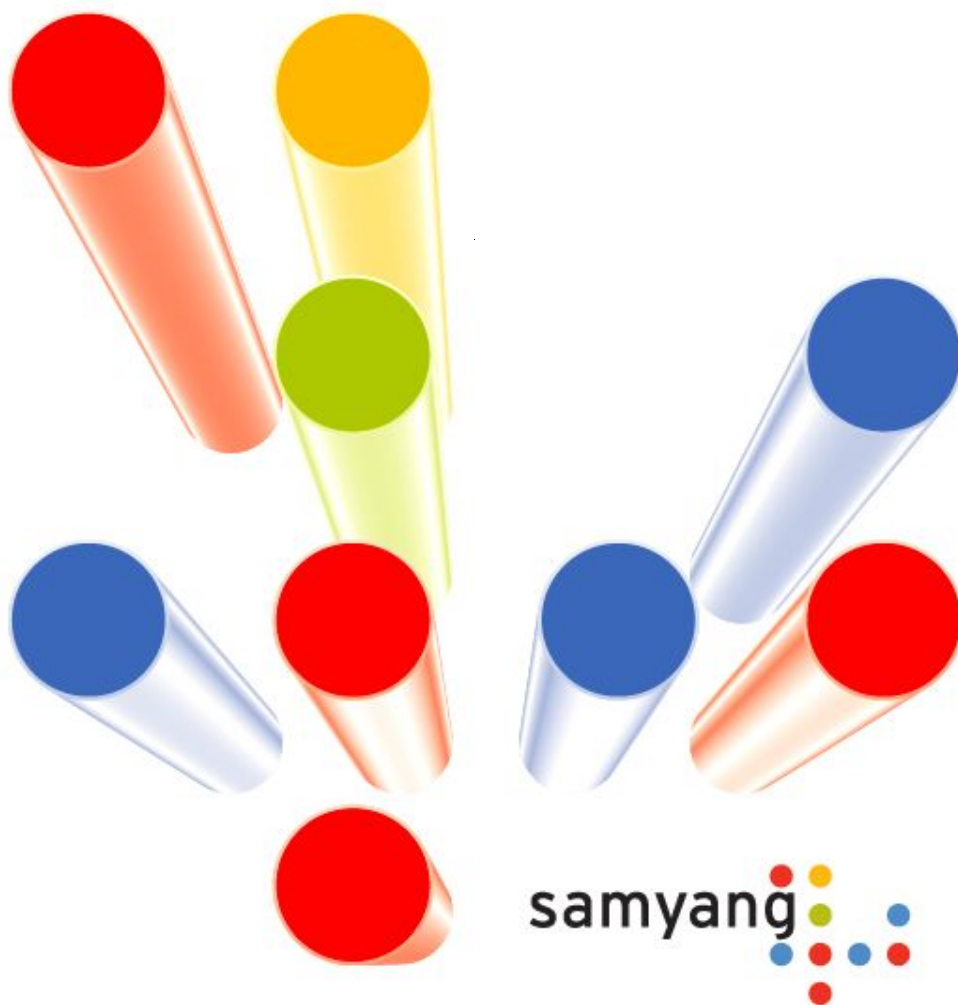


Product Information

TRIEX[®] 3025N1

Polycarbonate Resin

for electric applications





TRIEX 3025N1 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 3025N1 is a specially designed polycarbonate resin grade which has a flame resistance in combination with superior physical properties

CHARACTERISTICS

- Good flame resistance
- Workable under a wide range of temperature (-100 °C ~ 135 °C)
- High electrical performance
- Good dimensional stability
- Low moisture absorbency

APPLICATIONS

- TRIEX 3025N1 resin grade is used mainly in electronics and electric applications, including connector, lamps parts, light covers

TYPICAL DATA OF TRIEX 3025N1 GRADE



PROPERTY	UNIT	ASTM METHOD	TYPICAL DATA
PHYSICAL			
Specific Gravity	-	D792	1.20
Water Absorption (24 hours at 23℃)	%	D570	0.15
Melt Flow Rate (300℃, 1.2kg)	g/10min	D1238	30
MECHANICAL			
Tensile Strength at yield	kg _f /cm ² , Mpa, psi	D638	680, 67, 9670
Tensile Elongation at break	%	D638	120
Flexural Strength at yield	kg _f /cm ² , Mpa, psi	D790	900, 88, 12800
Flexural Modulus	kg _f /cm ² , Mpa, psi	D790	22,000, 2160, 312800
Izod Impact Strength, notched, 23℃ (1/8")	kg _f ·cm/cm, J/m, ft*lb/in	D256	50, 491, 9
Rockwell Hardness	R scale	D785	120
THERMAL			
HDT, 4.6 kg _f /cm ²	℃, °F	D648	144, 291
HDT, 18.6 kg _f /cm ²	℃, °F	D648	133, 271
Coefficient of Linear Thermal Expansion	mm/mm/℃	D696	5.5 x 10 ⁻⁵
ELECTRICAL			
Volume Resistivity	Ω·cm	D257	4 x 10 ¹⁶
Dielectric Strength	kV/mm	D149	30
Dielectric Constant	-	D150	2.80
Dissipation Factor	-	D150	0.0082
ARC Resistance	sec	D495	90
OTHERS			
UL-94 Flammability (1/16" thickness)	-	(UL 94)	V-0
Mold Shrinkage (3.2mm 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 3025N1 GRADE



- General processing conditions for TRIEX 3025N1 are shown below. Drying prior to processing is essential to ensure desired appearance and property performance.

SPECIFICATION	UNIT	CONDITIONS
Drying Temperature	℃, °F	120, 250
Drying Time	hr	3 ~ 5
Moisture Content, Max	%	0.02
Melt Temperature	℃, °F	290~320, 555~610
Nozzle Temperature	℃, °F	290~310, 555~590
Front Temperature	℃, °F	290~310, 555~590
Middle Temperature	℃, °F	280~300, 535~570
Rear Temperature	℃, °F	270~290, 520~555
Mold Temperature	℃, °F	80~100, 175~210
Back Pressure	MPa	0.3 ~ 0.7, 0.04~0.1
Screw Speed	rpm	40 ~ 70
Vent Depth	mm, inch	0.02 ~ 0.08, 0.0008~0.003

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