TRIREX 3025N2 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 3025N2 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℃ ~ 135℃)
- High electrical performance
- Good dimensional stability
- Low moisture absorbency

APPLICATIONS

- TRIREX 3025N2 resin grade is used mainly in electronics and electric applications, including connector, lamps parts, light covers

TYPICAL DATA OF TRIREX 3025N2 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 (270℃, 1.2kg)	g/10min	D1238	120
MECHANICAL			
Tensile Strength at yield	kg_f/cm^2	D638	670
Tensile Elongation at break	%	D638	120
Flexural Strength at yield	kg_f/cm^2	D790	860
Flexural Modulus	kg_f/cm^2	D790	22,500
Izod Impact Strength, notched, 23℃ (1/8")	kg_f·cm/cm	D256	80
Rockwell Hardness	R scale	D785	120
THERMAL			
HDT, 4.6 kg_f/cm^2	℃	D648	144
HDT, 18.6 kg_f/cm^2	℃	D648	135
Coefficient of Linear Thermal Expansion	mm/mm/℃	D696	$5.5X10^{-5}$
ELECTRICAL			
Volume Resistivity	Ω·cm	D257	$4X10^{16}$
Dielectric Strength	kV/mm	D149	30
Dielectric Constant	–	D150	2.80
Dissipation Factor	–	D150	0.0082
ARC Resistance	sec	D495	120
OTHERS			
UL-94 Flammability (1/8" thickness)	–	(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 TRIREX 3025N2 GRADE

General processing conditions for TRIREX 3025N2 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	3~5
Moisture Content, Max	%	0.02
Melt Temperature	℃	290 ~ 320
Nozzle Temperature	℃	290 ~ 310
Front Temperature	℃	290 ~ 310
Middle Temperature	℃	280 ~ 300
Rear Temperature	℃	270 ~ 290
Mold Temperature	℃	80 ~ 100
Back Pressure	MPa	0.3 ~ 0.7
Screw Speed	rpm	40 ~ 70
Vent Depth	mm	0.02 ~ 0.08

HEAD OFFICE
Samyang Corporation
263 yeonji-dong, Jongno-gu, Seoul, Korea. / TEL 82-2-740-7752 / FAX 82-2-740-7700

R&D CENTER
63-2 Hwaam-dong, yuseong-gu, Daejeon, Korea / TEL 82-42-865-8053 / FAX 82-42-865-8099

JEONJU PLANT
407 Palbok-dong 3-ga, Deokjin-gu, Jeonju, Krea / TEL 82-63-210-6660 / FAX 82-63-210-6677

SAMYANG KASEI
409 Palbok-dong 3-ga, Deokjin-gu, Jeonju, Krea / TEL 82-63-210-1114 / FAX 82-63-211-1240

SAMYANG ENGINEERING PLASTICS (SHANGHAI) CO.,LTD.
131, Shuangying-lu, Qingpu Gongyeyuan-qu,
Qingpu-qu, Shanghai, P.R.China / TEL 86-21-6922-2086 / FAX 86-21-6922-2271