

TRIBIT 1500GN15 GRADE

DESCRIPTION

- TRIBIT is the registered trademark of polybutylene terephthalate resin manufactured by Samyang Corporation. TRIBIT polybutylene terephthalate resins offer excellent mechanical properties, electrical performance, chemical resistance and processability, which allows it to be widely used for automotive, electrical and electronic industries.
- TRIBIT 1500GN15 is flame retarded, glass reinforced grade, which offers a unique combination of properties-high strength, modulus, heat resistance and excellent dimensional stability. Also this grade is rated V-0 in the UL94 flammability test in part thickness as low as 1/16in.

CHARACTERISTICS

- High strength, rigidity
- Excellent heat resistance
- Good flammability
- Minimal moisture absorption
- Exceptional dimensional stability
- Resistance to a wide range of chemicals, oils, grease and solvents
- Excellent electrical properties
- Fast injection-molding cycles

APPLICATIONS

- TRIBIT 1500GN15 resin grade is used in a wide range of automotive, electrical and electronic applications.
 - * Automotive distributor caps
 - * Motor housings
 - * Coil bobbins and coil cases
 - * Appliance housings

TYPICAL DATA OF TRIBIT 1500GN15 GRADE

PROPERTY	UNIT	ASTM METHOD	TYPICAL DATA
PHYSICAL			
Specific Gravity	—	D792	1.57
Water Absorption (24 hours at 23°C)	%	D570	0.08
Melt Flow Rate (250°C, 5kg)	g/10min	D1238	71
MECHANICAL			
Tensile Strength at break	kg _f /cm ²	D638	930
Tensile Elongation at break	%	D638	4
Flexural Strength at yield	kg _f /cm ²	D790	1,380
Flexural Modulus	kg _f /cm ²	D790	56,000
Izod Impact Strength, notched, 23°C (1/8")	kg _f ·cm/cm	D256	4
Rockwell Hardness	R scale	D785	120-
THERMAL			
HDT, 18.6 kg _f /cm ²	°C	D648	205
HDT, 4.6 kg _f /cm ²	°C	D648	203
Coefficient of Linear Thermal Expansion	mm/mm/°C	D696	3X10 ⁻⁵
ELECTRICAL			
Volume Resistivity	Ω·cm	D257	10 ¹⁶
Dielectric Strength	kV/mm	D149	20
Dielectric Constant	—	D150	3.1
Dissipation Factor	—	D150	0.02
ARC Resistance	Sec	D495	120
OTHERS			
UL-94 Flammability (1/16" thickness)	—	(UL 94)	V-0
Mold Shrinkage (3mm thickness)	%	D955	0.2~1.2

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 TRIBIT 1500GN15 GRADE

General processing conditions for TRIBIT 1500GN15 are shown below. Drying prior to processing is essential to ensure desired appearance and property performance.

SPECIFICATION	UNIT	CONDITIONS
Drying Temperature	℃	120~130
Drying Time	hr	3~5
Moisture Content, Max	%	0.02
Melt Temperature	℃	250~270
Nozzle Temperature	℃	245~265
Front Temperature	℃	250~270
Middle Temperature	℃	245~265
Rear Temperature	℃	240~260
Mold Temperature	℃	60~90
Back Pressure	%	<70
Screw Speed	%	<60
Injection Pressure	%	<70
Injection Speed	%	<50
Hold Pressure	%	<50
Injection Cushion	mm	3~6

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