TRIPET 2550GN30 GRADE

DESCRIPTION

- TRIPET is the registered trademark of polyethylene terephthalate resin manufactured by Samyang Corporation. Polyethylene terephthalate resins contain uniformly dispersed glass fibers or mineral/glass fiber combinations in polyethylene terephthalate (PET) resin that has been specially formulated for rapid crystallization during the injection molding process.

- TRIPET 2550GN30 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 1/32in.

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

- TRIPET 2550GN30 resin grade is used in a wide range of automotive, electrical and electronic applications.

TYPICAL DATA OF TRIPET 2550GN30 GRADE

PROPERTY	UNIT	ASTM METHOD	TYPICAL DATA
PHYSICAL			
Specific Gravity	–	D792	1.61
Water Absorption (24 hours at 23℃)	%	D570	0.1
Melt Flow Rate (260℃, 5kg)	g/10min	D1238	80
MECHANICAL			
Tensile Strength at break	kg_f/cm^2	D638	1,160
Tensile Elongation at break	%	D638	3
Flexural Strength at yield	kg_f/cm^2	D790	1,500
Flexural Modulus	kg_f/cm^2	D790	85,000
Izod Impact Strength, notched, 23℃ (1/8")	kg_f·cm/cm	D256	7.5
Rockwell Hardness	R scale	D785	114
THERMAL			
HDT, 4.6 kg_f/cm^2	℃	D648	245
HDT, 18.6 kg_f/cm^2	℃	D648	210
Coefficient of Linear Thermal Expansion	mm/mm/℃	D696	$3X10^{-5}$
ELECTRICAL			
Volume Resistivity	Ω·cm	D257	$1X10^{16}$
Dielectric Strength	kV/mm	D149	50
Dielectric Constant	–	D150	3.8
Dissipation Factor	–	D150	0.017
ARC Resistance	sec	D495	80
OTHERS			
UL-94 Flammability (0.75mm thickness)	–	(UL 94)	V-0
Mold Shrinkage (3mm thickness)	%	D955	0.2~0.4

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 TRIPET 2550GN30 GRADE

General processing conditions for TRIPET 2550GN30 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	℃	270 ~ 290
Nozzle Temperature	℃	265 ~ 285
Front Temperature	℃	270 ~ 290
Middle Temperature	℃	265 ~ 285
Rear Temperature	℃	260 ~ 280
Mold Temperature	℃	> 80
Back Pressure	%	<70
Screw Speed	%	<60
Injection Pressure	%	<70
Injection Speed	%	<50
Hold Pressure	%	<50
Injection Cushion	mm	3~6

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