

Product Description

Polybutylene Terephthalate-Glass Fiber Reinforced, 30%

Product Application

Automotive: Plug and Socket, Connectors, Door Handle, Fuse box

Electrical & Electronic: Bobbins, Switch parts, Connectors, Rotor Switch

General

Material Status	Commercial: Active
Filler/Reinforcement	Glass Fibber reinforcement, 30%
Forms	Pellets
Additive	Mold Release
ROHS Compliance	ROHS Compliant
Appearance/Colour	Natural
Processing Method	Injection molding

Physical & Rheological Properties	Typical Value	Unit	Test Method
Melt Flow Index	21-23	G/10min	ASTM-D1238
Density	1.50-1.54	G/cc	ASTM-D792
Shrinkage	0.5-0.7	%	ASTM-D955
Filler Content	28-32	%	ASTM-D5630

Mechanical Properties	Typical Value	Unit	Test Method
Tensile Strength @ Yield	1200-1300	Kg/cm ²	ASTM-D638
Elongation @ Break	5-9	%	ASTM-D638
Flexural Strength	1500-1700	Kg/cm ²	ASTM-D790
Flexural Modulus	6500-7500	Mpa	ASTM-D790
Notch Izod Impact Strength(23°C)	7-11	Kg cm/cm	ASTM -D256

Thermal	Typical Value	Unit	Test Method
Heat Deflection Temperature 0.45Mpa Unannealed	215-225	°C	ASTM-D648
1.8Mpa Unannealed	210-220		

Drying Conditions

General Processing Condition –Injection moulding dry Material ENSTER moisture during temperature should not be more than 100 to 110°C two to three hours for material exposed to the atmosphere. Moisture content after drying should be <0.02% avoid sudden cooling of dry pellet.

Injection molding Temperature(°C)

Feed zone	Transition zone	Metering zone	Nozzle	Mold
220°C - 230°C	230°C - 240°C	240°C - 250°C	250°C - 260°C	80°C - 100°C

Physical form and Packaging/Storage

ENRICH POLYMERS ENSTER is supplied in pellet form. It should be pre-dried as per guideline mentioned above prior to molding. Standard packing size is 25kg. In order to prevent moisture pick up and contamination supplied packaging should be kept closed and undamaged.

Material Safety

ENRICH POLYMERS ENSTER is thermally stable up to 140°C and does not give rise to hazardous material due to degradation or evolution of gases and vapors. ENRICH POLYMERS ENSTER decomposes above 300°C and gives unsaturated hydrocarbons and small quantity of aldehydes.

For more information on safety, refer individual material MSDS. Available on request.

Note

All information supplied in this publication is based on our current knowledge and experience. The data provided fall within the normal range of material properties and relate only to the specific material designed. The data provided should not be used to establish specification limits or used alone as the basis of design. ENRICH POLYMERS assumes no liability and makes no warranties of any kind expressed or implied, whatsoever in respect of application, processing or use made of aforementioned information or product.