

Product Description

Polypropylene-Glass Fiber Reinforcement, 40%

Product Application

Glass-reinforced PP compounds are widely used in the engine and transmission applications such as automotive air filter housing and General.

The parts that use glass-reinforced, talc, calcium carbonate PP compounds require UV stabilizers, heat stabilizers, high strength and stiffness.

General

Material Status	Commercial: Active
Filler/Reinforcement	Glass Fiber reinforcement, 40%
Forms	Pellets
Additive	Mold Release
Feature	High Heat Resistance, High Stiffness
Appearance/Colour	Black
Processing Method	Injection molding

Physical & Rheological Properties	Typical Value	Unit	Test Method
Melt Flow Index	3-5	G/10min	ASTM-D1238
Density	1.20-1.24	G/cc	ASTM-D792
Shrinkage	0.5-0.6	%	ASTM-D955
Filler Content	38-42	%	ASTM-D5630

Mechanical Properties	Typical Value	Unit	Test Method
Tensile Strength @ Yield	1050-1150	Kg/cm ²	ASTM-D638
Elongation @ Break	4-8	%	ASTM-D638
Flexural Strength	1300-1500	Kg/cm ²	ASTM-D790
Flexural Modulus	7500-8500	Mpa	ASTM-D790
Notch Izod Impact Strength	10-14	Kg cm/cm	ASTM -D256

Thermal	Typical Value	Unit	Test Method
Heat Deflection Temperature 0.455Mpa Unannealed	155-165	°C	ASTM-D648

Drying Conditions

General Processing Condition –Injection molding dry Material PP GF moisture during temperature should not be more than 70 to 80°C One to two 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
180°C - 200°C	200°C - 210°C	210°C - 220°C	220°C - 230°C	50°C - 60°C

Physical form and Packaging/Storage

ENRICH POLYMERS PP is supplied in pellet form. It should be 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 PP GF 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 PP GLASS FIBER 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

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