

Product Description

Polypropylene-Glass Fibber Reinforcement, 30%

Product Application

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

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

General

| | |
|----------------------|--------------------------------------|
| Material Status | Commercial: Active |
| Filler/Reinforcement | Glass Fibber reinforcement, 30% |
| Forms | Pellets |
| Additive | Mold Release |
| Feature | High Heat Resistance, High Stiffness |
| Appearance/Colour | Natural |
| Processing Method | Injection molding |

| Physical & Rheological Properties | Specification | Unit | Test Method |
|-----------------------------------|---------------|---------|-------------|
| Melt Flow Index | 8-10 | G/10min | ASTM-D1238 |
| Density | 1.11-1.15 | G/cc | ASTM-D792 |
| Shrinkage | 0.5-0.7 | % | ASTM-D955 |
| Filler Content | 28-32 | % | ASTM-D5630 |

| Mechanical Properties | Specification | Unit | Test Method |
|----------------------------|---------------|----------|-------------|
| Tensile Strength @ Yield | 950-1050 | Kg/cm2 | ASTM-D638 |
| Elongation @ Break | 6-10 | % | ASTM-D638 |
| Flexural Strength | 1200-1400 | Kg/cm2 | ASTM-D790 |
| Flexural Modulus | 5500-6500 | Mpa | ASTM-D790 |
| Notch Izod Impact Strength | 8-12 | Kg cm/cm | ASTM -D256 |

| Thermal | Specification | Unit | Test Method |
|--|---------------|------|-------------|
| Heat Deflection Temperature 0.455Mpa Unannealed | 150-160 | °C | ASTM-D648 |

Drying Conditions

General Processing Condition –Injection moulding 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 - 190°C | 190°C - 200°C | 200°C - 210°C | 210°C - 220°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 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 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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