

**Polypropylene****Fibremod™ WE380HP****Description**

Fibremod WE380HP is a high performance hybrid reinforced (20% glass fibre / 10% mineral) copolypropylene compound intended for injection moulding.

This material has an excellent balance between impact strength and stiffness combined with outstanding processability.

The product is available in standard black 9502. The product is available in natural colour.

Applications

Fibremod WE380HP has been developed especially for applications like:

Engine covers
Gear housings

Airbag containers

Special Features

Excellent flowability
Excellent impact behaviour

Excellent surface appearance

Physical Properties

| Property | Typical Value | Test Method |
|--|------------------------|-------------|
| Data should not be used for specification work | | |
| Density | 1130 kg/m ³ | ISO 1183 |
| Melt Flow Rate (230 °C/2,16 kg) | 10 g/10min | ISO 1133 |
| Tensile Modulus (1 mm/min) | 5.000 MPa | ISO 527-2 |
| Tensile Strength (50 mm/min) | 60 MPa | ISO 527 |
| Heat Deflection Temperature B (0,45 MPa) | 155 °C | ISO 75-2 |
| Charpy Impact Strength, notched (23 °C) | 11 kJ/m ² | ISO 179/1eA |
| Charpy Impact Strength, notched (-20 °C) | 9 kJ/m ² | ISO 179/1eA |

Values determined on standard injection moulded specimens conditioned at 23°C and 50% relative humidity after at least 96 hours storage time.

Application Related and Other Tests

| Property | Typical Value | Test Method |
|--|---------------|----------------------------|
| Data should not be used for specification work | | |
| Fogging (100 °C, 16 h) | < 1,5 mg | DIN 75201 |
| Emission | < 40 µgC/g | VDA 277 |
| Spiral flow length (230°C, 40°C, 600bar) | 590 mm | BTM = Borealis Test Method |



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Processing Techniques

The actual conditions will depend on the type of equipment used.

Injection Moulding

This product is easy to process with standard injection moulding machines. Following moulding parameters should be used as guidelines:

| | |
|---------------------|----------------|
| Feeding temperature | 40 - 80 °C |
| Mass temperature | 220 - 260 °C |
| Back pressure | Low to medium |
| Holding pressure | 30 - 60 MPa |
| Mould temperature | 30 - 50 °C |
| Screw speed | Low to medium |
| Flow front speed | 100 - 200 mm/s |

Storage

Fibremod WE380HP should be stored in dry conditions at temperatures below 50°C and protected from UV-light. Improper storage can initiate degradation, which results in odour generation and colour changes and can have negative effects on the physical properties of this product.

Safety

The product is not classified as dangerous. Please see our "Safety data sheet" / "Product safety information sheet" for details on various aspects of safety, recovery and disposal of the product. For more information, contact your Borealis representative.

Recycling

The product is suitable for recycling using modern methods of shredding and cleaning. In-house production waste should be kept clean to facilitate direct recycling.

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