

# Polypropylene MD231U Polypropylene Compound, Mineral Filled

Description

MD231U is a 20% mineral filled polypropylene compound intended for injection moulding.

This material has excellent balanced mechanical properties and a medium melt flow rate.

### Applications

MD231U is designed for:

Air ducts Air filters Air conditioning parts Automotive under the bonnet parts

# **Special Features**

Long term high heat stabilised UL registered under File E108112

High dimensional stability Low shrinkage

# **Physical Properties**

| Property                                 | Typical Value Test Method   Data should not be used for specification work Feature Content of the content of t |             |  |
|--|---|-------------|--|
| Density                                  | 1050 kg/m³  | ISO 1183    |  |
| Melt Flow Rate (230 °C/2,16 kg)          | 6 g/10min   | ISO 1133    |  |
| Flexural Modulus (2 mm/min)              | 2.700 MPa   | ISO 178     |  |
| Tensile Strength (50 mm/min)             | 36 MPa  | ISO 527-2   |  |
| Heat Deflection Temperature B (0,45 MPa) | 125 °C  | ISO 75-2    |  |
| Charpy Impact Strength, notched (23 °C)  | 3 kJ/m²   | ISO 179/1eA |  |
| Charpy Impact Strength, notched (-20 °C) | 1 kJ/m²   | 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 Figure 1 |           |
|-----------------------|---|-----------|
| Fogging (100 °C,16 h) | < 2 mg  | DIN 75201 |
| Emission              | < 50 µgC/g  | VDA 277   |

HongRong Engineering Plastics Co.,Ltd. Head Office Tel. +85-2-6957-5415 Research Center Tel.+188 1699 6168







# **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. To avoid residual humidity from transport or storage, the material should be pre-dried approximately 2h at 80°C. Following parameters should be used as guidelines:

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

#### Storage

**MD231** 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 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.

Please see our "Safety data sheet" / "Product safety information sheet" for details on various aspects of recovery and disposal of the product.

HongRong Engineering Plastics Co.,Ltd. Head Office Tel. +85–2–6957–5415 Research Center Tel.+188 1699 6168

