

# PRODUCT DATA SHEET

## POLYPROPYLENE

### MD231UC

20% MINERAL FILLED POLYPROPYLENE FOR INJECTION MOLDING

#### DESCRIPTION

**MD231UC** is a 20% mineral filled polypropylene compound for injection molding. It shows excellent mechanical properties such as high stiffness and contains an additive package for long term heat stabilization.

#### APPLICATIONS

**MD231UC** is designed for automotive under the bonnet parts

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

#### PHYSICAL PROPERTIES

Property	Typical Value	Test Method
Density	1060 kg/m <sup>3</sup>	ISO 1183
Melt Flow Rate (230°C/2.16kg)	7 g/10min	ISO 1133
Flexural Modulus (2mm/min)	2700 MPa	ISO 178
Tensile Stress at Yield (50mm/min)	36 MPa	ISO 527-2
Charpy Impact Strength, notched (23°C)	3.0 kJ/m <sup>2</sup>	ISO 179/1eA
Charpy Impact Strength, notched (-30°C)	1.0 kJ/m <sup>2</sup>	ISO 179/1eA
Heat Deflection Temperature A (1.8 N/mm <sup>2</sup> )	74 °C	ISO 75-2

\*Data should not be used for specification work

#### PROCESSING CONDITIONS

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

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:

Holding pressure	50% - 70% of the injection pressure
Injection speed	Low to medium
Mould temperature	30 - 50°C
Injection mass temperature	220 - 260°C
Screw speed	Slow to medium

Specific recommendations for processing conditions can be determined only when the application and type of equipment are known. Please contact your local Borouge representative for such particulars.

## STORAGE

**MD231UC** 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.

More information on storage can be found in Safety Information Sheet (SIS) for this product.

## SAFETY

The product is not classified as a hazardous preparation.

Please see our Safety Information Sheet (SIS) for details on various aspects of safety, recovery and disposal of the product, for more information contact your Borouge 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.

## RELATED DOCUMENTS

The following related documents are available on request, and represent various aspects on the usability, safety, recovery and disposal of the product.

Safety Information Sheet  
Statement on chemicals, regulations and standards

## STANDARDS

Borouge is certified to various ISO standards, please refer to [Borouge.com](http://Borouge.com) for more information.

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## DISCLAIMER

**The product(s) mentioned herein are not intended to be used for medical, pharmaceutical or healthcare applications and we do not support their use for such applications.**

To the best of our knowledge, the information contained herein is accurate and reliable as of the date of publication, however we do not assume any liability whatsoever for the accuracy and completeness of such information.

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No liability can be accepted in respect of the use of Borouge products in conjunction with other materials. The information contained herein relates exclusively to our products when not used in conjunction with any third party materials.

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