



# Polyethylene

## MG7547B

### Description

**MG7547B** is a high-density polyethylene produced by a low pressure process. This grade has an excellent impact strength and low distortion even at low temperatures. It also contains UV-stabilizer, which makes this grade especially suited for outdoor applications.

### Applications

Waste bins  
Fish crates

Storing cases

### Special features

Very good impact strength  
Very good toughness

### Physical Properties

| Property                                            | Typical Value         | Test Method |
|-----------------------------------------------------|-----------------------|-------------|
| Data should not be used for specification work      |                       |             |
| Density                                             | 954 kg/m <sup>3</sup> | ISO 1183    |
| Melt Flow Rate (190 °C/2,16 kg)                     | 4 g/10min             | ISO 1133    |
| Tensile Modulus (1 mm/min) <sup>1</sup>             | 950 MPa               | ISO 527-2   |
| Tensile Strain at Yield (50 mm/min) <sup>1</sup>    | 10 %                  | ISO 527-2   |
| Tensile Stress at Yield (50 mm/min) <sup>1</sup>    | 24 MPa                | ISO 527-2   |
| Heat Deflection Temperature (0,45 MPa) <sup>2</sup> | 71 °C                 | ISO 75-2    |
| Charpy Impact Strength, notched (23 °C)             | 11 kJ/m <sup>2</sup>  | ISO 179/1eA |
| Charpy Impact Strength, notched (-20 °C)            | 7 kJ/m <sup>2</sup>   | ISO 179/1eA |
| Hardness, Shore D                                   | 61                    | ISO 868     |

<sup>1</sup> Measured on injection moulded specimens acc. to ISO 1872-2

<sup>2</sup> Measured on injection moulded specimens acc. to ISO 1873-2

### Processing Techniques

Following parameters should be used as guidelines:

#### Injection Moulding

|                   |                      |                              |
|-------------------|----------------------|------------------------------|
| Melt temperature  | 210 - 275 °C         |                              |
| Holding pressure  | As low as possible   | Minimum to avoid sink marks. |
| Mould temperature | 10 - 40 °C           |                              |
| Injection speed   | As high as possible. |                              |

Shrinkage 1 - 2 %, depending on wall thickness and moulding parameters



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## Storage

**MG7547B** 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 a dangerous preparation.

## 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 safety, recovery and disposal of the product. For more information, contact your Borealis representative.

## 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 data sheet" / "Product safety information sheet"  
Statement on compliance to food contact regulations

## 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.**

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