



# Polypropylene

## MD494WG

Polypropylene Compound, Mineral Filled

### Description

**MD494WG** is a 40% mineral filled polypropylene compound intended for injection moulding.

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

### Applications

**MD494WG** has been developed especially for applications like:

Washing machine parts  
Household applications

Dishwashers components

### Special features

Good long term heat stability  
Detergent resistant

Good dimensional stability  
Good processability

### Physical Properties

| Property                                       | Typical Value          | Test Method |
|------------------------------------------------|------------------------|-------------|
| Data should not be used for specification work |                        |             |
| Density                                        | 1270 kg/m <sup>3</sup> | ISO 1183    |
| Melt Flow Rate (230 °C/2,16 kg)                | 8 g/10min              | ISO 1133    |
| Flexural Modulus (2 mm/min)                    | 2.400 MPa              | ISO 178     |
| Tensile Modulus (1 mm/min)                     | 2.500 MPa              | ISO 527-2   |
| Tensile Stress at Yield (50 mm/min)            | 23 MPa                 | ISO 527-2   |
| Heat Deflection Temperature B (0,45 MPa)       | 105 °C                 | ISO 75-2    |
| Heat Deflection Temperature A (1,80 MPa)       | 61 °C                  | ISO 75-2    |
| Vicat softening temperature (10 N)             | 157 °C                 | ISO 306     |
| Vicat softening temperature (50 N)             | 95 °C                  | ISO 306     |
| Charpy Impact Strength, notched (23 °C)        | 2,1 kJ/m <sup>2</sup>  | ISO 179/1eA |
| Charpy Impact Strength, notched (-20 °C)       | 1,3 kJ/m <sup>2</sup>  | ISO 179/1eA |
| Charpy Impact Strength, unnotched (23 °C)      | 50 kJ/m <sup>2</sup>   | ISO 179/1eU |
| Charpy Impact Strength, unnotched (-20 °C)     | 20 kJ/m <sup>2</sup>   | ISO 179/1eU |

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

### Application Related Tests

| Property                                                         | Typical Value | Test Method     |
|------------------------------------------------------------------|---------------|-----------------|
| Data should not be used for specification work                   |               |                 |
| Average process Shrinkage (in flow, 150x80x2 mm) <sup>1</sup>    | 1 %           | Borealis Method |
| Average process Shrinkage (cross flow, 150x80x2 mm) <sup>1</sup> | 1 %           | Borealis Method |

<sup>1</sup> VALUES MAY ONLY BE USED AS INDICATION, AND SHOULD NOT BE USED DIRECTLY IN MOULD DESIGN WITHOUT PRIOR VALIDATION

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 **Polypropylene**  
**MD494WG****Processing Techniques**

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

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

**Storage**

**MD494WG** should be stored in dry conditions at temperatures below 50°C and protected from UV-light. Improper storage can initiate degradation. 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. 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.

**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 chemicals, regulations and standards  
Recovery and disposal of polyolefins  
Information on emissions from processing and fires



## Polypropylene MD494WG

### 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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