

## Polypropylene

# Daplen™ EF221AE

## Polypropylene TPO Compound

### Description

**Daplen™ EF221AE** is a 20% mineral filled elastomer modified polypropylene compound intended for injection moulding. This material has excellent balanced mechanical properties, gives a good surface quality and is easy to process.

### Applications

**Daplen EF221AE** has been developed especially for demanding applications in the automotive industry.

Exterior trims

Bumpers

### Special Features

**Daplen EF221AE** has been designed especially for outstanding paint adhesion.

Suitable for applications, which require low expansion over a broad temperature scale

Excellent paintability

### Physical Properties

Property	Typical Value	Test Method
	Data should not be used for specification work	
Density	1060 kg/m <sup>3</sup>	ISO 1183
Melt Flow Rate (230 °C/2,16 kg)	20 g/10min	ISO 1133
Flexural Modulus (2 mm/min)	2,100 MPa	ISO 178
Tensile Strength (50 mm/min)	18 MPa	ISO 527-2
Heat Deflection Temperature B (0,45 MPa)	105 °C	ISO 75-2
Coefficient of Thermal Expansion (-30 °C/80 °C)	41 µm/mK	Borealis Test Method
Charpy Impact Strength, notched (23 °C)	50 kJ/m <sup>2</sup>	ISO 179/1eA
Charpy Impact Strength, notched (-20 °C)	6,5 kJ/m <sup>2</sup>	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.

### 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	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

**Daplen EF221AE** 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.

Daplen is a trademark of the Borealis group.

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### Safety

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.

### Regional Availability

Europe

For information on regional availability please contact Borealis Sales Representative.

### Issuer:

Marketing Automotive / Daniel Bahls

Product Management / Thomas Papesch

### 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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