



# Polypropylene

# Daplen™ EF209AE

Polypropylene TPO Compound

## Description

**Daplen EF209AE** 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 EF209AE** has been developed especially for the automotive industry.

Bumpers

Exterior trims

## Special Features

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                                         | 1040 kg/m <sup>3</sup> | ISO 1183        |
| Melt Flow Rate (230 °C/2,16 kg)                 | 22 g/10min             | ISO 1133        |
| Flexural Modulus (2 mm/min)                     | 1.700 MPa              | ISO 178         |
| Tensile Strength (50 mm/min)                    | 17 MPa                 | ISO 527-2       |
| Heat Deflection Temperature B (0,45 MPa)        | 90 °C                  | ISO 75-2        |
| Coefficient of Thermal Expansion (-30 °C/80 °C) | 45 µm/mK               | Borealis Method |
| Charpy Impact Strength, notched (23 °C)         | 60 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 moulding parameters should be used as guidelines:

|                     |               |
|---------------------|---------------|
| Feeding temperature | 40 - 80 °C    |
| Mass temperature    | 220 - 260 °C  |
| Back pressure       | Low to medium |
| Holding pressure    | 30 - 60 bar   |

Daplen is a trademark of the Borealis group.

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Mould temperature  
Screw speed  
Flow front speed

30 - 50 °C  
Low to medium  
100 - 200 m/min

## Storage

**Daplen EF209AE** 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.

## Regional Availability

Europe

South America

For information on regional availability please contact Borealis Sales Representative.

**Polypropylene****Daplen EF209AE****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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