Polypropylene
Daplen™ EF005AE

Polypropylene TPO Compound

Description

Daplen EF005AE is a 10% mineral filled elastomer modified polypropylene compound intended for injection moulding.

This material has an excellent balance between impact strength and stiffness, gives a good surface quality and is easy to process.

Applications

Daplen EF005AE has been developed especially for the car industry to be used in automotive exterior parts.

Bumpers
Exterior trims
Spoilers

Special Features

Suitable for applications, which require low expansion over a broad temperature scale
UV stabilised
Low in tigerstripes
High flowability

Physical Properties

Property	Typical Value Data should not be used for specification work	Test Method
Density	1060 kg/m³	ISO 1183
Melt Flow Rate (230 °C/2,16 kg)	25 g/10min	ISO 1133
Flexural Modulus (2 mm/min)	1.070 MPa	ISO 178
Tensile Strength (50 mm/min)	16 MPa	ISO 527-2
Heat Deflection Temperature B (0,45 MPa)	85 °C	ISO 75-2
Coefficient of Thermal Expansion (-30 °C/80 °C)	65 µm/mK	Borealis Method
Charpy Impact Strength, notched (23 °C)	52 kJ/m²	ISO 179/1eA
Charpy Impact Strength, notched (-20 °C)	6 kJ/m²	ISO 179/1eA
Charpy Impact Strength, notched (-30 °C)	4 kJ/m²	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:

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Feeding temperature	40 - 80 °C
Mass temperature	220 - 260 °C
Back pressure	Low to medium
Holding pressure	30 - 60 MPa
Mould temperature	30 - 50 °C
Screw speed	Low to medium
Flow front speed	100 - 200 mm/s

Storage

Daplen EF005AE 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
For information on regional availability please contact Borealis Sales Representative.

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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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