

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 Spoilers
Exterior trims

Special Features

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

Physical Properties

Property	Typical Value	Test Method
Data should not be used for specification work		
Density	960 kg/m ³	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 Test Method
Charpy Impact Strength, notched (23 °C)	52 kJ/m ²	ISO 179/1eA
Charpy Impact Strength, notched (-20 °C)	6 kJ/m ²	ISO 179/1eA
Charpy Impact Strength, notched (-30 °C)	4 kJ/m ²	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
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

Daplen is a trademark of the Borealis group.

Polypropylene

Daplen EF005AE

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

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 / Michael Otte

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.

To the best of our knowledge, the information contained herein is accurate and reliable as of the date of publication; however we do not assume any liability whatsoever for the accuracy and completeness of such information.

Borealis makes no warranties which extend beyond the description contained herein. Nothing herein shall constitute any warranty of merchantability or fitness for a particular purpose.

It is the customer's responsibility to inspect and test our products in order to satisfy itself as to the suitability of the products for the customer's particular purpose. The customer is responsible for the appropriate, safe and legal use, processing and handling of our products.

No liability can be accepted in respect of the use of any Borealis product in conjunction with any other products and/or materials. The information contained herein relates exclusively to our products when not used in conjunction with any other material unless as specifically provided for in the test methods stated above.