

PRODUCT DATA SHEET

08.07.2015 Ed.10



Polypropylene

Daplen™ EE103AE

Polypropylene TPO Compound

Description

Daplen EE103AE 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 EE103AE has been developed especially for the car industry to be used in automotive exterior parts.

Bumpers

Exterior trims

Special Features

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

High flowability allowing to mould complex-structured parts with very high "flow path / wall thickness ratios"
Available with and without UV-stabilisation

Physical Properties

Property	Typical Value	Test Method
Data should not be used for specification work		
Density	950 kg/m ³	ISO 1183
Melt Flow Rate (230 °C/2,16 kg)	12 g/10min	ISO 1133
Flexural Modulus (2 mm/min)	1.400 MPa	ISO 178
Tensile Strength (50 mm/min)	19 MPa	ISO 527-2
Heat Deflection Temperature B (0,45 MPa)	92 °C	ISO 75-2
Coefficient of Thermal Expansion (-30 °C/80 °C)	72 µm/mK	Borealis Method
Charpy Impact Strength, notched (23 °C)	50 kJ/m ²	ISO 179/1eA
Charpy Impact Strength, notched (-20 °C)	7 kJ/m ²	ISO 179/1eA
Charpy Impact Strength, notched (-30 °C)	5 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

Daplen is a trademark of the Borealis group.

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Mass temperature
Back pressure
Holding pressure
Mould temperature
Screw speed
Flow front speed

220 - 260 °C
Low to medium
30 - 60 MPa
30 - 50 °C
Low to medium
100 - 200 mm/s

Storage

Daplen EE103AE 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.

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.

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