



PolypropyleneTM DaplenTM EE189AI

Polypropylene TPO Compound

Description

Daplen EE189AI is a 15% mineral filled polypropylene compound intended for injection moulding.

This material has an excellent balance between impact strength and stiffness and is easy to process.

Applications

Daplen EE189AI has been developed especially for the car industry to be used in automotive interior parts.

Dashboards
Door panels and pockets

Other automotive interior parts

Special features

High scratch resistance
No tendency to show stickiness after outdoor exposure

Physical Properties

Property	Typical Value	Test Method
Data should not be used for specification work		
Density	1030 kg/m ³	ISO 1183
Melt Flow Rate (230 °C/2,16 kg)	11 g/10min	ISO 1133
Melt Flow Rate (230 °C/5,0 kg)	40 g/10min	ISO 1133
Flexural Modulus (2 mm/min)	1.900 MPa	ISO 178
Flexural Strength	30 MPa	ISO 178
Tensile Modulus (1 mm/min)	1.850 MPa	ISO 527-2
Tensile Strain at Yield (50 mm/min)	4,5 %	ISO 527-2
Tensile Strain at Break (50 mm/min)	21 %	ISO 527-2
Tensile Stress at Yield (50 mm/min)	22 MPa	ISO 527-2
Heat Deflection Temperature A (1,80 MPa)	53 °C	ISO 75-2
Heat Deflection Temperature B (0,45 MPa)	100 °C	ISO 75-2
Vicat softening temperature (10 N)	136 °C	ISO 306
Vicat softening temperature (50 N)	55 °C	ISO 306
Charpy Impact Strength, notched (23 °C)	16 kJ/m ²	ISO 179/1eA
Charpy Impact Strength, notched (-20 °C)	4,5 kJ/m ²	ISO 179/1eA
Charpy Impact Strength, unnotched (23 °C)	No break	ISO 179/1eU
Charpy Impact Strength, unnotched (-20 °C)	65 kJ/m ²	ISO 179/1eU
Hardness, Ball Indentation H 358/30	50 MPa	ISO 2039

Values determined on standard injection moulded specimens conditioned at 23°C and 50% relative humidity after at least 96 hours storage time.





Polypropylene

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Application Related Tests

Property	Typical Value	Test Method
Data should not be used for specification work		
Fogging (100 °C, 16 h)	< 2 mg	DIN 75201
Emission	< 50 µgC/g	VDA 277
Mould average Shrinkage (disk) ¹	1 %	Borealis Method

¹ VALUES MAY ONLY BE USED AS INDICATION, AND SHOULD NOT BE USED DIRECTLY IN MOULD DESIGN WITHOUT PRIOR VALIDATION

Processing Techniques

The actual conditions will depend on the type of equipment used.

Injection Moulding

To avoid residual humidity from transport or storage, the material should be pre-dried approximately 2h at 80°C. This product is easy to process with standard injection moulding machines. 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
Mould temperature	30 - 50 °C
Screw speed	Low to medium
Flow front speed	100 - 200 m/min

Storage

Daplen EE189AI 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.

