



# Polypropylene Daplen™ EH227AE

Polypropylene TPO Compound

## Description

**Daplen EH227AE** is a 20% mineral filled elastomer modified polypropylene compound intended for injection moulding.

This material has an excellent balance between impact strength and stiffness, high melt flow rate and gives a good surface quality.

## Applications

Automotive exterior applications  
Exterior trims

Rocker panels

## Special features

UV stabilised  
Excellent surface appearance on unpainted and grained parts

High flowability allowing to mould complex-structured parts with very high "flow path / wall thickness ratios"

## Physical Properties

Property	Typical Value	Test Method
	Data should not be used for specification work	
Density	1050 kg/m <sup>3</sup>	ISO 1183
Melt Flow Rate (230 °C/2,16 kg)	40 g/10min	ISO 1133
Flexural Modulus	1.550 MPa	ISO 178
Tensile Modulus (1 mm/min)	1.450 MPa	ISO 527-2
Tensile Strain at Yield	5 %	ISO 527-2
Tensile Stress at Yield	16 MPa	ISO 527-2
Heat Deflection Temperature B (0,45 MPa)	86 °C	ISO 75-2
Heat Deflection Temperature A (1,80 MPa)	47 °C	ISO 75-2
Vicat softening temperature A, (10 N)	102 °C	ISO 306
Vicat softening temperature B, (50 N)	32 °C	ISO 306
Coefficient of Thermal Expansion (23 °C/80 °C)	56 µm/mK	Borealis Method
Charpy Impact Strength, notched (23 °C)	42 kJ/m <sup>2</sup>	ISO 179/1eA
Charpy Impact Strength, notched (-20 °C)	6 kJ/m <sup>2</sup>	ISO 179/1eA
Charpy Impact Strength, notched (-30 °C)	4 kJ/m <sup>2</sup>	ISO 179/1eA
Charpy Impact Strength, unnotched (23 °C)	No break	ISO 179/1eU
Charpy Impact Strength, unnotched (-20 °C)	130 kJ/m <sup>2</sup>	ISO 179/1eU
Izod Impact Strength, notched (23 °C)	41 kJ/m <sup>2</sup>	ISO 180/1A
Izod Impact Strength, notched (-20 °C)	7 kJ/m <sup>2</sup>	ISO 180/1A
Hardness, Ball Indentation	26 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.





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## Application Related and other Tests

Property	Typical Value	Test Method
Mould average Shrinkage <sup>1</sup>	0,55 %	Borealis Method

Data should not be used for specification work

<sup>1</sup> 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

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 EH227AE** 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.





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## 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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