

Polypropylene Daplen™ EH104AE

Polypropylene TPO Compound

Description

Daplen EH104AE is a 12% 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

 Daplen EH104AE has been developed especially for the car industry to be used in automotive exterior parts.

 Bumpers
 Exterior trims

Special Features

UV stabilised High scratch resistance Suitable for applications, which require low expansion over a broad temperature scale 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 Data should not be used for	Test Method specification work	
Density	970 kg/m³	ISO 1183	
Melt Flow Rate (230 °C/2,16 kg)	40 g/10min	ISO 1133	
Flexural Modulus (2 mm/min)	1.200 MPa	ISO 178	
Tensile Strength (50 mm/min)	16 MPa	ISO 527-2	
Heat Deflection Temperature B (0,45 MPa)	80 °C	ISO 75-2	
Coefficient of Thermal Expansion (-30 °C/80 °C)	68 µm/mK	Borealis Method	
Charpy Impact Strength, notched (23 °C)	38 kJ/m²	ISO 179/1eA	
Charpy Impact Strength, notched (-20 °C)	5,5 kJ/m²	ISO 179/1eA	
Charpy Impact Strength, notched (-30 °C)	4,5 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.





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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. Daplen EH104AE is easy to process with standard injection moulding machines. Following parameters should be used as guidelines:

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

40 - 80 °C 220 - 260 °C Low to medium 30 - 60 bar 30 - 50 °C Low to medium 100 - 200 m/min

Storage

Daplen EH104AE 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.

