



HiPrene[®] HLG76NE

Long Glass Fiber reinforced PP compound-Natural Color

Product Description

HiPrene[®] HLG76NE is polypropylene with 60% long glass fibers. The fibers are chemically coupled to polypropylene matrix. Pellets are cylindrical and usual length of embedded fibers is 10mm. This material combines excellent strength and stiffness with perfect impact resistance at low temperatures also. This grade is available in natural color.

Product Characteristic

Status	Commercial: Active
Test Method Used	ISO
Availability	Europe
Features	Chemically Coupled High Strength Good Impact Resistance High Stiffness
Typical Customer Applications	Automotive Application/Industrial Parts

Typical Properties

Physical	Symbol	Test Method	Unit	Value
Melt Mass-Flow Rate	MFR	ISO 1133	g/10min	-
Specific Gravity	ρ	ISO 1183	g/cm ³	1,45
Mechanical	Symbol	Test Method	Unit	Value
Tensile Stress @ Yield	σ_m	ISO 527-2	MPa	155
Tensile Strain @ Break	ϵ_{TB}	ISO 527-2	%	2
Flexural Modulus @ 23°C (2mm/min)	E_f	ISO 178	MPa	15000
Impact	Symbol	Test Method	Unit	Value
Charpy Impact Strength @ 23°C, notched	$a_{I23^\circ C}$	ISO 179/1eA	kJ/m ²	36
Hardness	Symbol	Test Method	Unit	Value
Rockwell Hardness (R-Scale)	HR-R	ISO 2039	-	104
Thermal	Symbol	Test Method	Unit	Value
Heat Deflection Temperature B	T_f	ISO 75-2/B	°C	157
Volatile Matters	-	GS Method	%	0,1
Ash Content @ 600°C	Ash _{600°C}	ISO 3451	%	60

Notes: Typical properties; not to be constructed as specification

Processing Techniques

The actual conditions depends on the type of equipment used.

Injection Moulding

HiPrene HLG76NE is easy to process with standard injection moulding machines. To avoid residual humidity from transport or storage, the material should be pre-dried approximately 4h at 90°C. Following moulding parameters should be used as guidelines:

Feeding temperature	40 – 80 °C
Rear Temperature	220 – 230 °C
Middle Temperature	230 – 240 °C
Front Temperature	240 – 250 °C
Nozzle Temperature	240 – 250 °C
Melt Temperature	230 – 270 °C
Mold Temperature	30 – 75 °C
Injection Pressure	55 – 120 MPa
Injection Rate	Slow
Holding Pressure	40 – 80 MPa
Back Pressure	0 – 3 MPa

Storage

This material should be stored in dry conditions, protected from sunlight and at temperatures below 50 °C.

Contact

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