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GS Caltex Czech, s.r.o.

HiPrene® HLG74NE

Long Glass Fiber reinforced PP compound-Natural Color

Product Description

HiPrene® HLG74NE is polypropylene with 40% 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	
Avalilability	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/cm³	**1,21**
Mechanical		**Symbol**	**Test Method**	**Unit**	**Value**
	Tensile Stress @ Yield	σ_m	ISO 527-2	MPa	**130**
	Tensile Strain @ Break	ε_{tB}	ISO 527-2	%	**4**
	Flexural Modulus @ 23°C (2mm/min)	E_f	ISO 178	MPa	**9000**
Impact		**Symbol**	**Test Method**	**Unit**	**Value**
	IZOD Impact Strength @ 23°C, notched	$a_{iN23°C}$	ISO 179/1eA	kJ/m²	**25**
Hardness		**Symbol**	**Test Method**	**Unit**	**Value**
	Rockwell Hardness (R-Scale)	HR-R	ISO 2039	-	**102**
Thermal		**Symbol**	**Test Method**	**Unit**	**Value**
	Heat Deflection Temperature B	T_f	ISO 75-2/B	°C	**160**
	Volatile Matters	-	GS Method	%	**0,12**
	Ash Content @ 600°C	$Ash_{600°C}$	ISO 3451	%	**40**

Notes: Typical properties; not to be constructed as specification

Technical Data Sheet

Processing Techniques

The actual conditions depends on the type of equipment used.

Injection Moulding

HiPrene HLG74NE 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 quidelines:

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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