



HiPrene[®] HLG73BEG

Long Glass Fiber reinforced PP compound-Black Color

Product Description

HiPrene[®] HLG73BEG is impact modified polypropylene with 30% 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 even at low temperatures. This grade is available in black color.

Product Characteristic

Status	Commercial: Active
Test Method Used	ISO
Availability	Europe
Features	Chemically Coupled High Strength Excellent 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	1,115
Mechanical	Symbol	Test Method	Unit	Value
Tensile Stress @ Yield	σ_m	ISO 527-2	MPa	102
Tensile Strain @ Break	ϵ_{tB}	ISO 527-2	%	2,5
Flexural Modulus @ 23°C (2mm/min)	E_f	ISO 178	MPa	5400
Impact	Symbol	Test Method	Unit	Value
Charpy Impact Strength @ 23°C, notched	$a_{IN23°C}$	ISO 179/1eA	kJ/m ²	22
Charpy Impact Strength @ -30°C, notched	$a_{IN-30°C}$	ISO 179/1eA	kJ/m ²	24
Hardness	Symbol	Test Method	Unit	Value
Rockwell Hardness (R-Scale)	HR-R	ISO 2039	-	89
Thermal	Symbol	Test Method	Unit	Value
Heat Deflection Temperature B	T_f	ISO 75-2/B	°C	156
Volatile Matters	-	GS Method	%	0,12
Ash Content @ 600°C	Ash _{600°C}	ISO 3451	%	30

Notes: Typical properties; not to be constructed as specification

Processing Techniques

The actual conditions depends on the type of equipment used.

Injection Moulding

HiPrene HLG73BEG 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

GS Caltex Czech, s.r.o.

Bohumínská 455/20, Karviná – Staré Město (Nové Pole), 733 01

GPS: N49°52'003", E018°31'078"

Czech republic

tel.: 595 390 703; 595 390 724; 595 390 717