



## HiPrene<sup>®</sup> HLG74BE

Long Glass Fiber reinforced PP compound-Black Color

### Product Description

*HiPrene<sup>®</sup> HLG74BE 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 black color.*

### Product Characteristic

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

### Typical Properties

Physical	Symbol	Test Method	Unit	Value
Melt Mass-Flow Rate	MFR	ISO 1133	g/10min	-
Specific Gravity	$\rho$	ISO 1183	g/cm <sup>3</sup>	<b>1,21</b>
Mechanical	Symbol	Test Method	Unit	Value
Tensile Stress @ Yield	$\sigma_m$	ISO 527-2	MPa	<b>130</b>
Tensile Strain @ Break	$\epsilon_{tB}$	ISO 527-2	%	<b>4</b>
Flexural Modulus @ 23°C (2mm/min)	$E_f$	ISO 178	MPa	<b>9000</b>
Impact	Symbol	Test Method	Unit	Value
Charpy Impact Strength @ 23°C, notched	$a_{IN23^\circ C}$	ISO 179/1eA	kJ/m <sup>2</sup>	<b>25</b>
Hardness	Symbol	Test Method	Unit	Value
Rockwell Hardness (R-Scale)	HR-R	ISO 2039	-	<b>102</b>
Thermal	Symbol	Test Method	Unit	Value
Heat Deflection Temperature B	$T_f$	ISO 75-2/B	°C	<b>160</b>
Volatile Matters	-	GS Method	%	<b>0,12</b>
Ash Content @ 600°C	Ash <sub>600°C</sub>	ISO 3451	%	<b>40</b>

**Notes:** Typical properties; not to be constructed as specification

## Processing Techniques

The actual conditions depends on the type of equipment used.

### Injection Moulding

*HiPrene HLG74BE* 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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