



HiPrene[®] HSG43HT

Polypropylene Compound-Glass Fiber Reinforced-Black Color

Product Description

HiPrene[®] HSG43HT is a glass fiber filled polypropylene compound suitable for injection moulding. This material excellent Long-Term Thermal Stability and combines good stiffness, good processability and surface finish. It has been developed especially for Automotive applications where high heat resistance is necessary. This material is available in black color.

Product Characteristic

Status	Commercial: Active
Test Method Used	ISO
Availability	Europe
Features	Glass Fiber Reinforced Good Stiffness High Heat Resistance Good Processability
Typical Customer Applications	Automotive Parts

Typical Properties

Physical	Symbol	Test Method	Unit	Value
Melt Mass-Flow Rate	MFR	ISO 1133	g/10min	5,99
Density	ρ	ISO 1183	g/cm ³	1,1
Mechanical	Symbol	Test Method	Unit	Value
Tensile Stress @ Break	σ_m	ISO 527-2	MPa	86,2
Tensile Strain @ Break	ϵ_{tB}	ISO 527-2	%	3,6
Flexural Modulus ¹ @ 23°C	E_f	ISO 178	MPa	6900
Impact	Symbol	Test Method	Unit	Value
Charpy Impact Strength @ 23°C, notched	$a_{IN23^\circ C}$	ISO 179/1eA	kJ/m ²	9,7
Charpy Impact Strength @ -30°C, notched	$a_{IN23^\circ C}$	ISO 179/1eA	kJ/m ²	7,1
Hardness	Symbol	Test Method	Unit	Value
Rockwell Hardness (R-Scale)	HR-R	ISO 2039	-	106
Thermal	Symbol	Test Method	Unit	Value
Volatile Matters	-	GS Method	%	0,12
Ash Content @ 600°C	Ash _{600°C}	ISO 3451	%	30,88
HDT	Symbol	Test Method	Unit	Value
Deflection Temperature		ISO 75-1	°C	146

¹ feed rate 2 mm/min

Notes: Typical properties; not to be constructed as specification

Processing Techniques

The actual conditions depends on the type of equipment used.

Injection Moulding

HiPrene HSG43HT 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. Following moulding parameters should be used as guidelines:

Feeding temperature	40 – 80 °C
Mass temperature	210 – 250 °C
Back pressure	Low to medium
Holding pressure	40 – 65 bar
Mould temperature	30 – 50 °C
Screw speed	Low to medium
Injection speed	100 – 200 m/min

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