



HiPrene[®] HSG44

Polypropylene Compound-Glass Fiber Reinforced

Product Description

HiPrene[®] HSG44 is a 40% glass fiber filled polypropylene compound suitable for injection moulding. This material combines good stiffness, good processability and surface finish. It has been developed for Industrial Parts and Non-visible Automotive Parts. This material is available in natural or black color.

Product Characteristic

Status	Commercial: Active
Test Method Used	ISO
Availability	Europe
Features	Glass Fiber Reinforced Good Surface Finish High Stiffness Good Processability
Typical Customer Applications	Industrial Parts/Non-visible Automotive Parts

Typical Properties

Physical	Symbol	Test Method	Unit	Value
Melt Mass-Flow Rate	MFR	ISO 1133	g/10min	2,5
Specific Gravity	ρ	ISO 1183	g/cm ³	1,21
Mechanical	Symbol	Test Method	Unit	Value
Tensile Stress @ Yield	σ_m	ISO 527-2	MPa	120
Tensile Strain @ Yield	ϵ_{TB}	ISO 527-2	%	4
Flexural Modulus ¹ @ 23°C	E_f	ISO 178	MPa	9000
Impact	Symbol	Test Method	Unit	Value
Charpy Impact Strength @ 23°C, notched	$a_{IN23^\circ C}$	ISO 179/1eA	kJ/m ²	13
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	%	0,1
Ash Content @ 600°C	Ash _{600°C}	ISO 3451	%	40

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 HSG44 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	220 – 260 °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