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GS Caltex Czech, s.r.o.

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	
Avalilability	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/cm³	**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	$a_{iN23°C}$	ISO 179/1eA	kJ/m²	**9,7**
	Charpy Impact Strength @ -30°C, notched	$a_{iN23°C}$	ISO 179/1eA	kJ/m²	**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

Technical Data Sheet

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 quidelines:

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