



HiPrene[®] MSG43E

Polypropylene Compound

Product Description

HiPrene[®] MSG43E is a 30% glass fiber filled, impact modified polypropylene compound suitable for injection moulding. This material combines excellent impact/stiffness balance and high heat stability. This grade is available in natural or color-matched, pellet form.

Product Characteristic

Status	Commercial: Active	
Test Method Used	ISO	
Availability	Europe	
Features	Heat resistance	High Impact Resistance
	High Stiffness	Good Processability
Typical Customer Applications	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	1,13
Mechanical	Symbol	Test Method	Unit	Value
Tensile Stress @ Yield	σ_m	ISO 527-2	MPa	65
Tensile Strain @ Break	ϵ_{tB}	ISO 527-2	%	7,5
Flexural Modulus ¹ @ 23°C	E_f	ISO 178	MPa	4700
Impact	Symbol	Test Method	Unit	Value
Charpy Impact Strength @ 23°C, notched	$a_{I23^\circ C}$	ISO 179/1eA	kJ/m ²	35
Hardness	Symbol	Test Method	Unit	Value
Rockwell Hardness (R-Scale)	HR-R	ISO 2039	-	85
Thermal	Symbol	Test Method	Unit	Value
Volatile Matters	-	GS Method	%	0,15
Ash Content @ 600°C	ASH _{600°C}	ISO 3451	%	33

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 MSG43E 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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