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GS Caltex Czech, s.r.o.

HiPrene® MT41VJ

Polypropylene TPO Compound

Product Description

HiPrene® MT41VJ is a 13% mineral filled, elastomer modified polypropylene compound suitable for injection moulding. This material has an excellent balance between impact strength and stiffness. It gives a good surface quality and is especially designed for esthetical interior parts such as instrument panels, door panels and trims. This grade is available in natural or color-matched, pellet form.

Product Characteristic

Status	Commercial: Active	
Test Method Used	ISO	
Avalilability	Europe	
Features	Excellent Scratch Resistance	High Impact Resistance
	High Stiffness	Good Processability
Typical Customer Applications	Automotive Interior Parts	

Typical Properties

Physical		**Symbol**	**Test Method**	**Unit**	**Value**
	Melt Mass-Flow Rate	MFR	ISO 1133	g/10min	**12**
	Specific Gravity	ρ	ISO 1183	g/cm³	**0,98**
Mechanical		**Symbol**	**Test Method**	**Unit**	**Value**
	Tensile Stress @ Yield	σ_m	ISO 527-2	MPa	**20**
	Tensile Strain @ Yield	ε_{tB}	ISO 527-2	%	**6**
	Flexural Modulus @ 23°C (2mm/min)	E_f	ISO 178	MPa	**1700**
Impact		**Symbol**	**Test Method**	**Unit**	**Value**
	Charpy Impact Strength @ 23°C, notched	$a_{iN23°C}$	ISO 179/1eA	kJ/m²	**30**
Hardness		**Symbol**	**Test Method**	**Unit**	**Value**
	Rockwell Hardness (R-Scale)	HR-R	ISO 2039	-	**-**
Thermal		**Symbol**	**Test Method**	**Unit**	**Value**
	Heat Deflection Temperature B	T_f	ISO 75-2/B	°C	**95**
	Volatile Matters	-	GS Method	%	**0,1**
	Ash Content @ 600°C	$Ash_{600°C}$	ISO 3451	%	**13**

Notes: Typical properties; not to be constructed as specification

Technical Data Sheet

Other Properties

Property	Typical Value	Test Method
Scratch Resistance Test [2]	ΔL = 0,8	acc. PV 3952
Mould average Shrinkage-Flow Direction[3]	0,85%	GS Method
Mould average Shrinkage-Cross Flow Direction[3]	0,85%	GS Method
Odour (80°C, 2 h)	2,7	acc. PV 3900
Emission	< 50 µg	VDA 277
Fogging (100°C, 16 h)	< 2 mg	DIN 75201
Flammability	85 mm/min	TL 1010

[2] Performed on black plaques with rough structure

[3] Values may only be used as indication and should not be used directly in mould design without prior validation

Processing Techniques

The actual conditions depends on the type of equipment used.

Injection Moulding

HiPrene MT41VJ 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
Melt 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 mm/s

Storage

This material should be stored in dry conditions, protected from sunlight and at temperatures below 50 °C.

Contact

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