



## HiPrene<sup>®</sup> MT63IV

Polypropylene TPO Compound

### Product Description

*HiPrene<sup>®</sup> MT63IV is a 16% mineral filled, impact modified polypropylene compound for Interior applications with excellent impact/stiffness balance, good flowability and good scratch resistance. It has been primarily designed for esthetical interior parts like a dashboard and door trims. This grade is available in natural or color-matched, pellet form.*

### Product Characteristic

<b>Status</b>	Commercial: Active
<b>Test Method Used</b>	ISO
<b>Availability</b>	Europe
<b>Features</b>	Scratch Resistance                      High Impact Resistance High Stiffness                                  Good Dimensional Stability
<b>Typical Customer Applications</b>	Automotive Interior Parts-Dashboard, Door Trims

### Typical Properties

Physical	Symbol	Test Method	Unit	Value
Melt Mass-Flow Rate	MFR	ISO 1133	g/10min	17
Specific Gravity	$\rho$	ISO 1183	g/cm <sup>3</sup>	1,02
Mechanical	Symbol	Test Method	Unit	Value
Tensile Stress @ Yield	$\sigma_m$	ISO 527-2	MPa	21
Tensile Strain @ Yield	$\epsilon_{tB}$	ISO 527-2	%	6
Flexural Modulus @ 23°C (2mm/min)	$E_f$	ISO 178	MPa	1850
Impact	Symbol	Test Method	Unit	Value
Charpy Impact Strength @ 23°C, notched	$a_{IN23^\circ C}$	ISO 179/1eA	kJ/m <sup>2</sup>	40
Hardness	Symbol	Test Method	Unit	Value
Rockwell Hardness (R-Scale)	HR-R	ISO 2039	-	70
Thermal	Symbol	Test Method	Unit	Value
Heat Deflection Temperature B	$T_f$	ISO 75-2/B	°C	90
Volatile Matters	-	GS Method	%	0,1
Ash Content @ 600°C	Ash <sub>600°C</sub>	ISO 3451	%	16

**Notes:** Typical properties; not to be constructed as specification

## Other Properties

Property	Typical Value	Test Method
Scratch Resistance Test <sup>2</sup>	$\Delta L = 1,1$	acc. PV 3952
Mould average Shrinkage-Flow Direction <sup>3</sup>	0,85%	GS Method
Mould average Shrinkage-Cross Flow Direction <sup>3</sup>	0,85%	GS Method
Odour (80°C, 2 h)	2,6	acc. PV 3900
Emission	< 50 $\mu\text{g}$	VDA 277
Fogging (100°C, 16 h)	< 2 mg	DIN 75201
Flammability	70 mm/min	TL 1010

<sup>2</sup> Performed on black plaques with rough structure

<sup>3</sup> 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 MT63IV* 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
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 m/min

### Storage

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

### Contact

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