

# HiPrene® MT61DT

Polypropylene Compound

## **Product Description**

**HiPrene® MT61DT** is a 16% mineral filled, elastomer modified polypropylene compound suitable for injection moulding. This material combines good impact/stiffness balance, high scratch resistance and good flowability. It gives a good surface quality and is especially designed for esthetical interior parts such as instrument panels, lower and upper dashboard, door panels and trims. This grade is available in natural or color-matched, pellet form.

Product Characteristic		
Status	Commercial: Active	
Test Method Used	ASTM	
Avalilability	Europe	
Features	Scratch Resistance	High Flow
	High Stiffness	Good Processability
Typical Customer Applications	Automotive Interior Parts	

## **Typical Properties**

Physical		Symbol	Test Method	Unit	Value
-	Melt Mass-Flow Rate	MFR	ASTM D1238	g/10min	27
	Specific Gravity	ρ	ASTM D792	g/cm <sup>3</sup>	1,02
Mechanical		Symbol	Test Method	Unit	Value
	Tensile Stress @ Yield	$\sigma_{m}$	ASTM D638	MPa	22
	Tensile Strain @ Break	ε <sub>tB</sub>	ASTM D638	%	70
	Flexural Modulus @ 23°C (2mm/min)	E <sub>f</sub>	ASTM D790	MPa	2000
Impact		Symbol	Test Method	Unit	Value
	IZOD Impact Strength @ 23°C	<b>a</b> iN23°C	ASTM D256	kJ/m <sup>2</sup>	15
Hardness		Symbol	Test Method	Unit	Value
	Rockwell Hardness (R-Scale)	HR-R	ASTM D785	-	75
Thermal		Symbol	Test Method	Unit	Value
	Temperature of Deflection under Load (HDT)	T <sub>f</sub>	ASTM D648	°C	-
	Volatile Matters	-	GS Method	%	0,1
	Ash Content @ 600°C	Ash <sub>600°C</sub>	GS Method	%	16

Notes: Typical properties; not to be constructed as specification

# **Other Properties**

Property	Typical Value	Test Method
Scratch Resistance Test <sup>2</sup>	∆L = 0,8	acc. PV 3952
Mould average Shrinkage-Flow Direction <sup>3</sup>	1,1%	GS Method
Mould average Shrinkage-Cross Flow Direction <sup>3</sup>	1,1%	GS Method
Odour (80°C, 2 h)	2,8	acc. PV 3900
Emission	< 50 µg	VDA 277
Fogging (100°C, 16 h)	< 2 mg	DIN 75201
Flammability	85 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 MT61DT* 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 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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