



Polypropylene TPO Compound

# **Product Description**

HiPrene® MT42TB is a medium 20% mineral filled, impact modified polypropylene compound suitable for injection moulding. This material has very good impact/stiffness balance. This grade is primarily designed for invisible C/PAD but it is suitable also for other interior parts where is necessary to have high impact resistance. This grade is paintable and is available in natural or color-matched, pellet form.

#### **Product Characteristic**

Status Commercial: Active

Test Method Used ASTM
Avalilability Europe

**Features** Paintable High Impact Resistance

Excellent Dimensional Stability High Stiffness

Typical Customer Applications Automotive Interior Parts-C/PAD

# **Typical Properties**

Physical		Symbol	Test Method	Unit	Value
	Melt Mass-Flow Rate	MFR	ASTM D1238	g/10min	9
	Specific Gravity	ρ	ASTM D792	g/cm <sup>3</sup>	1,03
Mechanical		Symbol	Test Method	Unit	Value
	Tensile Stress @ Yield	$\sigma_{\text{m}}$	ASTM D638	MPa	18
	Tensile Strain @ Break	<b>ε</b> <sub>tB</sub>	ASTM D638	%	50
	Flexural Modulus @ 23°C (2mm/min)	Ef	ASTM D790	MPa	1700
Impact		Symbol	Test Method	Unit	Value
	IZOD Impact Strength @ 23°C	<b>a</b> iN23°C	ASTM D256	kJ/m²	45
Hardness		Symbol	Test Method	Unit	Value
	Rockwell Hardness (R-Scale)	HR-R	ASTM D785	-	65
Thermal		Symbol	Test Method	Unit	Value
	Temperature of Deflection under Load (HDT)	Tf	ASTM D648	°C	-
	Volatile Matters	-	GS Method	%	0,1
	Ash Content @ 600°C	Ash <sub>600°C</sub>	GS Method	%	20

Notes: Typical properties; not to be constructed as specification

# **Processing Techniques**

The actual conditions depends on the type of equipment used.

### Injection Moulding

*HiPrene MT42TB* 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 $40-80\,^{\circ}\mathrm{C}$ Melt temperature $210-250\,^{\circ}\mathrm{C}$ Back pressureLow to mediumHolding pressure $40-65\,\mathrm{bar}$ Mould temperature $30-50\,^{\circ}\mathrm{C}$ Screw speedLow to mediumInjection speed $100-200\,\mathrm{mm/s}$ 

### Storage

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

#### Contact

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