



PRODUCT INFORMATION

**NILFLEX 10 K15TE**

Polypropylene copolymer good flow 15% mineral filled, high impact, good surface appearance.

**ISO short Form** ISO 1043: PP-MD15 Pellets

**Key Features**

- Improved impact resistance
- Designed for injection moulding applications
- Mineral filled

**Availability**

- YT: laser printable
- S: heat stabilized
- MT: long-term service stability for contact with copper
- L: UV stabilized
- All colours

**Process**

- INJECTION MOULDING

**Application**

- General purpose applications
- Garden furniture
- Consumer
- Building
- Automotive

Property	Method	Unit	Value	Condition	State
<b>PHYSICAL</b>					
Density (+23°C)	ISO 1183	g/cm <sup>3</sup>	1,01		
Filler content	ISO 3451	%	15	550°C - 1 h	
Water Absorption (24h / +23°C)	ISO 62	%	0,05		
Mould Shrinkage (Parallel)	Internal method	%	0,9 - 1,2		
Mould Shrinkage (Normal)	Internal method	%	0,9 - 1,2		
Melt Flow Rate (MFR)	ISO 1133	g/10 min	10	230°C - 2,16 kg	
<b>MECHANICAL</b>					
Tensile Yield Strength	ISO 527-1,2	MPa	24	Speed 50 mm/min	
Elongation at Break	ISO 527-1,2	%	75	Speed 50 mm/min	

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Flexural Modulus	ISO 178	MPa	2000	Speed 1 mm/min
IZOD Notched Impact (+23°C)	ASTM D256	J/m	350	

**THERMAL**

Softening Temperature - 5 kg (VST/B/50)	ISO 306	°C	60
Deflection Temperature 1,80 MPa (HDT A)	ISO 75A	°C	55

**FLAMMABILITY**

Flame Behaviour (1,6 mm)	UL94	Class	HB
Flame Behaviour (3,2 mm)	UL94	Class	HB

<b>INJECTION MOULDING</b>	<b>Value</b>
Drying Temperature (Desiccant Dryer)	70 - 80°C
Drying Time (Desiccant Dryer)	2 - 4 hours
Suggested Max Moisture	< 0,2 %
Suggested Max Re grind	< 15%
Melt Temperature	200 - 240°C
Feed Temperature	50°C
Rear Temperature	190°C
Middle Temperature	210°C
Front Temperature	230°C
Nozzle Temperature	220°C
Mould Temperature	30 - 50°C
Injection Rate	50 - 150 mm/sec
Injection Pressure	60 - 120 Mpa
Packing Pressure	30 - 80 Mpa
Back Pressure	Medium (0,5 - 5 MPa)
Screw Revolving Speed	50 - 150 rpm
Cushion	5 - 8 mm
Vent Depth	0,05 mm

**Notes**

It is normally not necessary to dry NILENE compounds, however should there be surface moisture (condensate) on the moulding compound as a result of incorrect storage, drying process is required. NILENE must be stored indoors at a temperature below 40°C avoiding humidity and direct sunlight as well. NILENE can be processed on a standard injection moulding unit. A general purpose metering screw is recommended with a zone distribution of 40% feed, 40% transition and 20% metering. When the heating cylinder is completely purged of NILENE material the machine may be shut down.