



PRODUCT INFORMATION

NILENE P K25T

Polypropylene homopolymer 25% talcum filled flame rating UL94 HB.

ISO short ISO 1043: PP-MD25
Form Pellets
UL file E143048

Key Features

- Designed for injection moulding applications
- Good flowability
- Mineral filled

Availability

- YT: laser printable
- S: heat stabilized
- AT: antistatic
- L: UV stabilized
- D: detergent stabilized
- All colours

Compliance

- UL94 HB approved all colours at 1,6 mm. UL746 B approved.

Process

- INJECTION MOULDING

Application

- Household
- Electronic
- Electrical
- Automotive

Property	Method	Unit	Value	Condition	State
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ELECTRICAL

Tracking Resistance (CTI - Method A)	IEC 60112	Volt	>600		
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PHYSICAL

Density (+23°C)	ISO 1183	g/cm ³	1,07-1,09		
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Filler content	ISO 3451	%	25	600°C - 1h	
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Granule Humidity	Internal method	%	0,05		
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Mould Shrinkage (Parallel)	Internal method	%	1,1		
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Mould Shrinkage (Normal)	Internal method	%	1,1		
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Melt Flow Rate (MFR)	ISO 1133	g/10 min	10	230°C - 2,16 kg	
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MECHANICAL

Tensile Modulus	ISO 527-1,2	MPa	2700	Speed 1 mm/min
Tensile Yield Strength	ISO 527-1,2	MPa	30	Speed 50 mm/min
Elongation at Break	ISO 527-1,2	%	30	Speed 50 mm/min
Flexural Modulus	ISO 178	MPa	2600	Speed 1 mm/min
IZOD Notched Impact	ASTM D256	J/m	30	+23°C

THERMAL

Softening Temperature - 1 kg (VST/A/50)	ISO 306	°C	155
Softening Temperature - 5 kg (VST/B/50)	ISO 306	°C	90
Deflection Temperature 1,80 MPa (HDT A)	ISO 75A	°C	75
Deflection Temperature 0,45 MPa (HDT B)	ISO 75B	°C	125

FLAMMABILITY

Flame Behaviour (3,2 mm)	UL94	Class	HB	UL approved
Oxygen index	ASTM D2863	%	21	

INJECTION MOULDING

	Value
Drying Temperature (Circulating Air Oven)	70 - 90°C
Drying Temperature (Desiccant Dryer)	70 - 90°C
Drying Time (Circulating Air Oven)	3 - 5 hours
Drying Time (Desiccant Dryer)	0,5 - 2,5 hours
Suggested Max Moisture	0,2%
Suggested Max Re grind	< 10%
Melt Temperature	190 - 230°C
Feed Temperature	50°C
Rear Temperature	170°C
Middle Temperature	190°C
Front Temperature	200°C
Nozzle Temperature	220°C
Mould Temperature	40 - 60°C
Injection Rate	50 - 150 mm/sec



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Back Pressure	0,3 - 0,5 Mpa
Screw Revolving Speed	50 - 100 rpm
Cushion	3 - 6 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.