



PRODUCT INFORMATION

**NILENE P20 K65B**

Polypropylene homopolymer 65% barium sulphate filled, high flow, designed for application requiring high density compound.

**ISO short Form** ISO 1043: PP-MD65 Pellets

**Key Features**

- Highly mineral filled
- High density

**Availability**

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

**Process**

- INJECTION MOULDING

Property	Method	Unit	Value	Condition	State
<b>ELECTRICAL</b>					
Tracking Resistance (CTI - Method A)	IEC 60112	Volt	>600		
<b>PHYSICAL</b>					
Density (+23°C)	ISO 1183	g/cm <sup>3</sup>	1,88		
Filler content	ISO 3451	%	65	600°C - 1h	
Granule Humidity	Internal method	%	0,15		
Mould Shrinkage (Parallel)	Internal method	%	0,6		
Mould Shrinkage (Normal)	Internal method	%	0,6		
Melt Flow Rate (MFR)	ISO 1133	g/10 min	20	230°C - 2,16 kg	
<b>MECHANICAL</b>					
Tensile Yield Strength	ISO 527-1,2	MPa	25	Speed 50 mm/min	
Elongation at Break	ISO 527-1,2	%	6	Speed 50 mm/min	
IZOD Notched Impact	ASTM D256	J/m	20	+23°C	
<b>THERMAL</b>					
Softening Temperature - 1 kg (VST/A/50)	ISO 306	°C	155		



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Softening Temperature - 5 kg (VST/B/50)	ISO 306	°C	105
Deflection Temperature 1,80 MPa (HDT A)	ISO 75A	°C	90
Deflection Temperature 0,45 MPa (HDT B)	ISO 75B	°C	135

**FLAMMABILITY**

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

<b>INJECTION MOULDING</b>	<b>Value</b>
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
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.