PRODUCT INFORMATION

NILENE P15 K20C

Polypropylene homopolymer medium high flow 20% calcium carbonate filled.

ISO short ISO 1043: PP-MD20
Form Pellets

Key Features

- Designed for injection moulding applications
- Mineral filled

Availability

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

Process

- INJECTION MOULDING

Application

- General purpose applications

Property	Method	Unit	Value	Condition	State
PHYSICAL					
Density (+23°C)	ISO 1183	g/cm^3	1,04		
Filler content	ISO 3451	%	20	550°C - 1 h	
Water Absorption (24h / +23°C)	ISO 62	%	0,05		
Mould Shrinkage (Parallel)	Internal method	%	1,1		
Mould Shrinkage (Normal)	Internal method	%	1,1		
Melt Flow Rate (MFR)	ISO 1133	g/10 min	15	230°C - 2,16 kg	
MECHANICAL					
Tensile Yield Strength	ISO 527-1,2	MPa	30	Speed 50 mm/min	
Elongation at Break	ISO 527-1,2	%	35	Speed 50 mm/min	
Flexural Modulus	ISO 178	MPa	2400	Speed 1 mm/min	
IZOD Notched Impact	ASTM D256	J/m	30	+23°C	
THERMAL					

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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	67
Coefficient of linear thermal expansion (parallel)	ISO 11359-1,-2	K^-1	6X10exp(-5)

FLAMMABILITY

Flame Behaviour (1,6 mm)	UL94	Class	HB

INJECTION MOULDING	Value
Drying Temperature (Desiccant Dryer)	70 - 80°C
Drying Time (Desiccant Dryer)	2 - 4 hours
Suggested Max Regrind	< 10%
Melt Temperature	180 - 220°C
Feed Temperature	150°C
Rear Temperature	170°C
Middle Temperature	190°C
Front Temperature	200°C
Nozzle Temperature	210°C
Mould Temperature	30 - 70°C
Injection Rate	Medium to fast
Injection Pressure	50 - 120 Mpa
Packing Pressure	30 - 100 Mpa
Back Pressure	0,5 - 3 Mpa
Screw Revolving Speed	< 300 mm/sec
Cushion	< 5 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.