PRODUCT INFORMATION

NILENE E10 K70BB

Polypropylene copolymer 70% barium sulphate filled, medium flow, designed for application requiring high density compound.

ISO short ISO 1043: PP-MD70
Form Pellets

Key Features

- High density

Availability

- S: heat stabilized
- L: UV stabilized
- D: detergent stabilized
- All colours

Process

- INJECTION MOULDING

Property	Method	Unit	Value	Condition	State
ELECTRICAL					
Tracking Resistance (CTI - Method A)	IEC 60112	Volt	>600		
PHYSICAL					
Density (+23°C)	ISO 1183	g/cm^3	2,05		
Filler content	ISO 3451	%	70	600°C - 1h	
Granule Humidity	Internal method	%	0,15		
Mould Shrinkage (Parallel)	Internal method	%	0,5		
Mould Shrinkage (Normal)	Internal method	%	0,5		
Melt Flow Rate (MFR)	ISO 1133	g/10 min	10	230°C - 2,16 kg	
MECHANICAL					
Tensile Yield Strength	ISO 527-1,2	MPa	24	Speed 50 mm/min	
Elongation at Break	ISO 527-1,2	%	12	Speed 50 mm/min	
IZOD Notched Impact	ASTM D256	J/m	30	+23°C	
THERMAL					
Softening Temperature - 1 kg (VST/A/50)	ISO 306	°C	152		
Softening Temperature - 5 kg (VST/B/50)	ISO 306	°C	96		

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Deflection Temperature 1,80 MPa (HDT A)	ISO 75A	°C	78
Deflection Temperature 0,45 MPa (HDT B)	ISO 75B	°C	130

FLAMMABILITY

Flame Behaviour (3,2 mm)	UL94	Class	HB
Oxigen 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 Regrind	< 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.