



PRODUCT INFORMATION

NILFLEX 6

Polypropylene copolymer medium flow, high impact.

ISO short Form ISO 1043: PP Pellets

Key Features

- Unfilled
- Designed for injection moulding applications
- Medium low flow

Availability

- YT: laser printable
- S2: high heat stabilized
- S: heat stabilized
- MT: long-term service stability for contact with copper
- G: scratch resistant
- AT: antistatic
- L: UV stabilized
- All colours

Process

- INJECTION MOULDING

Application

- General purpose applications
- Furniture
- 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	0,90		
Granule Humidity	Internal method	%	0,05		
Mould Shrinkage (Parallel)	Internal method	%	1,5		
Mould Shrinkage (Normal)	Internal method	%	1,5		
Melt Flow Rate (MFR)	ISO 1133	g/10 min	6	230°C - 2,16 kg	

MECHANICAL



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Tensile Yield Strength	ISO 527-1,2	MPa	24	Speed 50 mm/min
Elongation at Break	ISO 527-1,2	%	> 100	Speed 50 mm/min
Flexural Modulus	ISO 178	MPa	750	Speed 1 mm/min
IZOD Notched Impact (+23°C)	ASTM D256	J/m	500	

THERMAL

Softening Temperature - 1 kg (VST/A/50)	ISO 306	°C	151	
Softening Temperature - 5 kg (VST/B/50)	ISO 306	°C	55	
Deflection Temperature 1,80 MPa (HDT A)	ISO 75A	°C	45	

FLAMMABILITY

Flame Behaviour (3,2 mm)	UL94	Class	HB	
Burning Rate (US-FMVSS 302)	ISO 3795	mm/min	<100	Thickness > 1,5 mm
Oxygen index	ASTM D2863	%	21	

INJECTION MOULDING

	Value
Drying Temperature (Desiccant Dryer)	70 - 80°C
Drying Time (Desiccant Dryer)	2 - 4 hours
Suggested Max Regrind	< 10%
Melt Temperature	190 - 230°C
Feed Temperature	150°C
Rear Temperature	175°C
Middle Temperature	200°C
Front Temperature	210°C
Nozzle Temperature	215°C
Mould Temperature	30 - 70°C
Injection Rate	Slow to Medium
Injection Pressure	50 - 120 Mpa
Packing Pressure	30 - 100 Mpa
Back Pressure	5 - 10 Mpa
Screw Revolving Speed	< 300 mm/sec
Cushion	< 5 mm
Vent Depth	0,05 mm



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Notes It is normally not necessary to dry NILFLEX compounds, however should there be surface moisture (condensate) on the moulding compound as a result of incorrect storage, drying process is required. NILFLEX must be stored indoors at a temperature below 40°C avoiding humidity and direct sunlight as well. NILFLEX 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 NILFLEX material the machine may be shut down. The processing parameters like processing temperatures are a recommendation and can be adjusted in function of injection machine size, part geometry and design.
