

TECHNICAL DATA SHEET

TECHNYL B 230 NC



TECHNYL B 230 NC is an unfilled copolyamide 6.6/6, impact modified, for injection moulding. This product offers an excellent notched impact resistance, even at low temperature.

General

Feature	Molding release agent Impact resistant	Good surface finish
Polymer type	PA66/6 copolymer	
Processing technology	Injection molding	
Certification	RoHS	EC 1907/2006 (REACH)
Applications	Sport	
Colors available	Natural	
Forms	Pellets	

Product identification

ISO 1043 abbreviation	PA66/6
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Condition	Standard	Unit	Value
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Physical properties

Density		ISO 1183	g/cm ³	1.09
Humidity absorption	T=23°C, 50% RH	ISO 62	%	1.3 - 1.4
Molding shrinkage, parallel		ISO 294-4, 2577	%	1.55 - 175
Molding shrinkage, normal		ISO 294-4, 2577	%	2 - 2.1

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	Condition	Standard	Unit	Value
Mechanical properties			dam / cond.*	
Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	2300 / 700
Stress at break		ISO 527-1/-2	MPa	50 / 35
Strain at break		ISO 527-1/-2	%	50 / 250
Yield stress		ISO 527-1/-2	MPa	60 / 45
Yield strain		ISO 527-1/-2	%	5 / 12
Flexural modulus, ISO 178	2 mm/min	ISO 178	MPa	2000 / 600
Flexural strength, ISO 178	2 mm/min	ISO 178	MPa	80 / 55
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m²	8 / 30
Charpy notched impact strength, -30°C	-30°C	ISO 179/1eA	kJ/m²	5 / -
Izod notched impact strength, +23°C	+23°C	ISO 180/1A	kJ/m²	7 / 20
Izod notched impact strength, -30°C	-30°C	ISO 180/1A	kJ/m²	4 / -

Thermal properties

Melting temperature, 10°C/min		ISO 11357-1	°C	242
Temp. of deflection under load, 0.45 MPa	0.45 MPa	ISO 75	°C	185
Temp. of deflection under load, 1.80 MPa	1.80 MPa	ISO 75	°C	62

Electrical properties

Volume resistivity		IEC 62631-3-1	ohm.m	1E+016
Surface resistivity		IEC 62631-3-1	ohm	5E+015
Comparative tracking index	Solution A	IEC 60112	V	600
CTI performance level category		Sol A		PLC 0
Dielectric strength	1 mm	IEC 60243-1	kV/mm	20

Burning behaviour

Flammability, 1.5 mm	1.5 mm	UL 94		HB
Burning rate, FMVSS, Thickness 1 mm		FMVSS 302		<100

*: conditioned according to ISO 1110

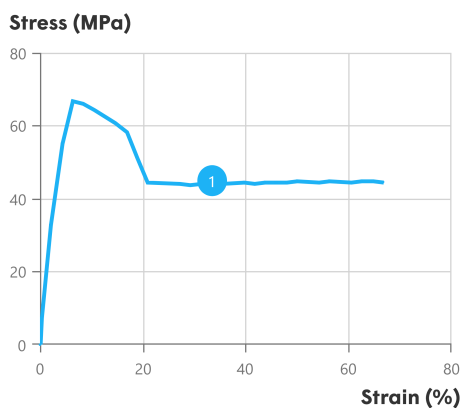
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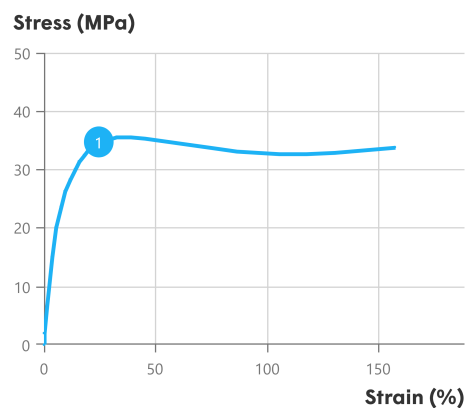
Processing conditions

Drying temperature/time	80
Suggested max moisture	0.2 %
Rear temperature	250 - 260 °C
Middle temperature	255 - 265 °C
Front temperature	265 - 275 °C
Recommended mould temperature	60 - 80 °C

Stress-strain, dry



Stress-strain, conditioned



Injection notes

The material is supplied in airtight bags, ready for use. In case that the virgin material has absorbed moisture, it must be dried with a dehumidified air drying equipment, dew point minimum -20°C. Recommended time 2-4h.

Injection advice

For unfilled polyamides, Domo recommends the use of high alloy steel with a low chromium content. For example: X38CrMoV5-1 (EN Norm) - 1.2367 / 1.2343 (DIN Norm). In the case of high requirements on surface quality a mould temperature of up to 120°C can be considered. The processing parameters like processing temperatures are a recommendation and can be adjusted in function of injection machine size, part geometry / design.

Disclaimer

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