

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

Polymer type	PA66/6 copolymer		
Certifications	RoHS	EC 1907/2006 (REACH)	
Feature	impact modified good surface finish	moulding release agent	
Applications	sport		
Colors available	natural		
Forms	pellets		
Processing technology	injection moulding		

### Product identification

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

	Condition	Standard	Unit	Value
Density		ISO 1183	g/cm <sup>3</sup>	1.09
Water absorption	24 hr, 23°C	ISO 62	%	1.3 - 1.4
Molding shrinkage, parallel		ISO 294-4, 2577	%	1.5 - 1.8
Molding shrinkage, normal		ISO 294-4, 2577	%	2.0 - 2.1

	Condition	Standard	Unit	Value
<b>Mechanical properties</b>				<b>dam / cond.*</b>
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/m <sup>2</sup>	8 / 30
Charpy notched impact strength, -30°C	-30°C	ISO 179/1eA	kJ/m <sup>2</sup>	5 / -
Izod notched impact strength, +23°C	+23°C	ISO 180/1A	kJ/m <sup>2</sup>	7 / 20
Izod notched impact strength, -30°C	-30°C	ISO 180/1A	kJ/m <sup>2</sup>	4 / -

\*: **conditioned according to ISO 1110**

	Condition	Standard	Unit	Value
<b>Thermal properties</b>				
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

	Condition	Standard	Unit	Value
<b>Burning behaviour</b>				
Flammability, 1.5 mm	1.5 mm	UL 94		HB
Burning rate, FMVSS, Thickness 1 mm		FMVSS 302		< 100 mm/min

Condition	Standard	Unit	Value
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### Electrical properties

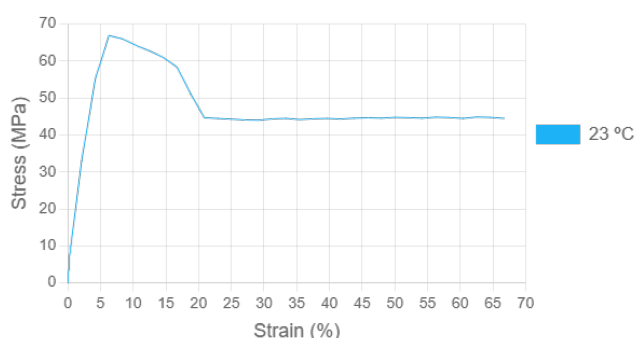
Condition	Standard	Unit	Value
Volume resistivity	IEC 62631-3-1	ohm.m	1.0E16
Surface resistivity	IEC 62631-3-1	ohm	5.0E15
Comparative tracking index	Solution A	IEC 60112	V
CTI performance level category	Sol A		PLC 0
Dielectric strength	1 mm	IEC 60243-1	kV/mm

### 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

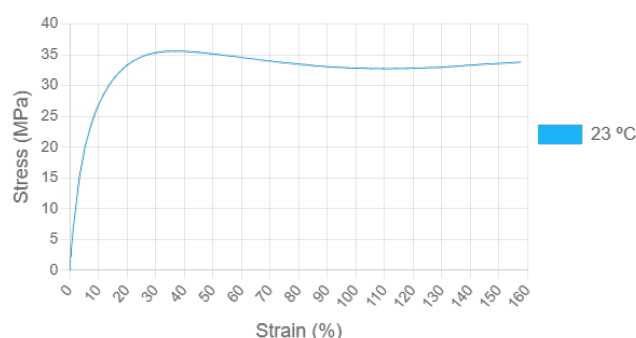
Stress-strain, dry

Temperature (°C)



Stress-strain, conditioned

Temperature (°C)



### 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

All reinforced, flame retardant compounds generate some level of abrasion/corrosion to the steel processing equipment. These issues may be magnified by using incorrect processing conditions (temperatures, residence time, moisture level ...) during the moulding process. Therefore, Domo recommends you adhere to the processing conditions detailed in this technical data sheet. For equipment that comes into contact with molten flame retardant compounds, Domo advises you to use a steel with high chromium and high carbon content (having a minimum concentration of 16% chromium) to prevent corrosion and abrasion. For the correct reference of steel associated to flame retardant compounds' processing, please refer to your equipment

# TECHNYL®

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caring is our formula

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## Injection advice

manufacturers. In the case of high requirements on surface quality a mould temperature of up to 120°C can be considered. 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.