

TECHNICAL DATA SHEET

TECHNYL B 316 NC

TECHNYL FE 50221 AL

TECHNYL B 316 NC is an unreinforced copolyamide 66/6, high viscosity, for injection moulding. This grade is particularly suitable for medium and large thickness parts where high characteristics are required (impact, vibration), i.e: plastic insulators for railway bindings and crossbar / handles.

General

Certifications	RoHS	EC 1907/2006 (REACH)
Polymer type	PA66/6 copolymer	
Feature	good surface finish	high impact resistant
Applications	automotive applications industrial applications	consumer applications
Colors available	black	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 ³	1.14
Water absorption	24 hr, 23°C	ISO 62	%	1.6

	Condition	Standard	Unit	Value
Mechanical properties				dam / cond.*
Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	3000 / 1100
Stress at break		ISO 527-1/-2	MPa	50 / 50
Strain at break		ISO 527-1/-2	%	50 / 400
Flexural modulus, ISO 178	2 mm/min	ISO 178	MPa	2600 / 800
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m ²	5.5 / 40
Izod notched impact strength, +23°C	+23°C	ISO 180/1A	kJ/m ²	5 / 35

*: **conditioned according to ISO 1110**

	Condition	Standard	Unit	Value
Thermal properties				
Melting temperature, 10°C/min		ISO 11357-1	°C	242
Temp. of deflection under load, 1.80 MPa	1.80 MPa	ISO 75	°C	67

	Condition	Standard	Unit	Value
Burning behaviour				
Flammability, 1.5 mm	1.5 mm	UL 94		HB

	Condition	Standard	Unit	Value
Electrical properties				
Volume resistivity		IEC 62631-3-1	ohm.m	1.0E13
Surface resistivity		IEC 62631-3-1	ohm	1.0E14
Comparative tracking index	Solution A	IEC 60112	V	575.0
CTI performance level category		Sol A		PLC 1
Dielectric strength	1 mm	IEC 60243-1	kV/mm	26.0

Processing conditions

Drying temperature/time	80 °C
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Processing conditions

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

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.