

TECHNICAL DATA SHEET

TECHNYL B 218 MT25 V15 BK 21N

TECHNYL B 218 MT25 V15 BK 21N is a polyamide 66/6, reinforced with 25% of mineral filler and 15% of glass fibre, heat stabilized, for injection moulding.

General

Polymer type	PA66/6 copolymer		
Certifications	RoHS	EC 1907/2006 (REACH)	
Feature	heat-aging stabilized low warpage	good surface finish	
Applications	automotive applications	fittings	
Colors available	black		
Forms	pellets		
Processing technology	injection moulding		

Product identification

ISO 1043 abbreviation	PA66/6-MD25+GF15		
ISO 16396 designation	PA66/6,(MD+GF)40,MHLA,S14-080		

Condition	Standard	Unit	Value
-----------	----------	------	-------

Physical properties

	Condition	Standard	Unit	Value
Density		ISO 1183	g/cm ³	1.47
Water absorption	24 hr, 23°C	ISO 62	%	1.1 - 1.2

	Condition	Standard	Unit	Value
Mechanical properties				dam / cond.*
Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	8500 / 4500
Stress at break		ISO 527-1/-2	MPa	125 / 70
Strain at break		ISO 527-1/-2	%	3.5 / -
Flexural modulus, ISO 178	2 mm/min	ISO 178	MPa	8100 / 3500
Charpy impact strength, +23°C	+23°C	ISO 179/1eU	kJ/m ²	45 / 80
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m ²	3.5 / 5.5
Izod notched impact strength, +23°C	+23°C	ISO 180/1A	kJ/m ²	3.8 / 6

*: **conditioned according to ISO 1110**

	Condition	Standard	Unit	Value
Thermal properties				
Melting temperature, 10°C/min		ISO 11357-1	°C	242

	Condition	Standard	Unit	Value
Burning behaviour				
Burning rate, FMVSS, Thickness 1 mm		FMVSS 302		< 100 mm/min

	Condition	Standard	Unit	Value
Electrical properties				
Volume resistivity		IEC 62631-3-1	ohm.m	1.0E13
Surface resistivity		IEC 62631-3-1	ohm	5.0E15
Comparative tracking index	Solution A	IEC 60112	V	475.0
CTI performance level category		Sol A		PLC 1
Dielectric strength	1 mm	IEC 60243-1	kV/mm	35.0

Processing conditions	
Drying temperature/time	80 °C

Processing conditions

Suggested max moisture	0.2 %
Rear temperature	255 - 265 °C
Middle temperature	260 - 270 °C
Front temperature	270 - 280 °C
Recommended mould temperature	70 - 100 °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 reinforced polyamides, Domo recommends the use of steel with a high content of carbon, and purified for polishing, to avoid or limit the abrasion. For example: X38CrMoV5-1 (EN Norm) - 1.2367 /1.2343 (DIN Norm) or X160CrMoV12 (EN Norm) - 1.2601 /1.2379 (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.