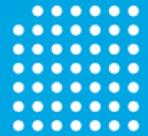


TECHNICAL DATA SHEET

TECHNYL STAR S 218 MZ20 V10 BK 2N



TECHNYL STAR S 218 MZ20 V10 BK 2N is based on a patented high flow polyamide 6 resin (TechnylStar), heat stabilized, reinforced with 20% of mineral filler and 10% of glass fibre, for injection moulding. Due to its outstanding flow characteristics, this grade provides a significant productivity improvement and allows more freedom in mould design and part design versus standard polyamide solution.

General

Certifications	RoHS	EC 1907/2006 (REACH)
Polymer type	PA6	
Feature	heat-aging stabilized high dimensional stability very high flow	excellent surface finish low warpage
Applications	automotive applications industrial applications	consumer applications
Colors available	black	
Forms	pellets	
Processing technology	injection moulding	

Product identification

ISO 1043 abbreviation	PA6-MD20+GF10
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Condition	Standard	Unit	Value
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Physical properties

Density	ISO 1183	g/cm ³	1.36
Molding shrinkage, parallel	ISO 294-4, 2577	%	0.4
Molding shrinkage, normal	ISO 294-4, 2577	%	0.8

	Condition	Standard	Unit	Value
Mechanical properties				dam / cond.*
Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	7800 / -
Stress at break		ISO 527-1/-2	MPa	110 / -
Strain at break		ISO 527-1/-2	%	2.8 / -
Charpy impact strength, +23°C	+23°C	ISO 179/1eU	kJ/m ²	35 / -
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m ²	3.4 / -
Izod impact strength, +23°C	+23°C	ISO 180/1U	kJ/m ²	32 / -
Izod notched impact strength, +23°C	+23°C	ISO 180/1A	kJ/m ²	3.7 / -

*: **conditioned according to ISO 1110**

	Condition	Standard	Unit	Value
Thermal properties				
Melting temperature, 10°C/min		ISO 11357-1	°C	222
Temp. of deflection under load, 1.80 MPa	1.80 MPa	ISO 75	°C	186

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

Processing conditions	
Drying temperature/time	80 °C
Suggested max moisture	0.2 %
Rear temperature	230 - 235 °C
Middle temperature	235 - 240 °C
Front temperature	240 - 245 °C
Recommended mould temperature	60 - 90 °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
DOMO Engineering Plastics

Injection notes

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.