+135-3858-6433 (GuangDong)
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TECHNYL STAR®
High-flow PA6 & PA 6.6

DOMO
caring is our formula

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 caracteristics, this grade provides a significant productivity improvement and allows more freedom in mould design and part design versus standard polyamide solution.

General

Feature	Heat-aging stabilized Very high flow Low warpage	High dimensional stability Excellent surface finish
Polymer type	PA6 (Polyamide 6)	
Processing technology	Injection molding	
Certification	RoHS	EC 1907/2006 (REACH)
Applications	Automotive Applications Industrial Applications	Consumer good application
Colors available	Black	
Forms	Pellets	

Product identification

ISO 1043 abbreviation	PA6-MD20+GF10

	Condition	Standard	Unit	Value
Physical properties				
Density		ISO 1183	g/cm³	1.36
Molding shrinkage, parallel		ISO 294-4, 2577	%	0.4
Molding shrinkage, normal		ISO 294-4, 2577	%	0.8
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/m²	35 / -
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m²	3.4 / -
Izod impact strength, +23°C	+23°C	ISO 180/1U	kJ/m²	32 / -
Izod notched impact strength, +23°C	+23°C	ISO 180/1A	kJ/m²	3.7 / -

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Thermal properties

	Condition	Standard	Unit	Value
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

**: conditioned according to ISO 1110*

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 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.

Disclaimer