

TECHNICAL DATA SHEET

TECHNYL STAR S 216L2 V30 BK

TECHNYL STAR S 216L2 V30 Black is based on a patented high flow polyamide 6 resin (TechnylStar), UV stabilized, reinforced with 30% 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 and part design versus a standard polyamide solutions.

General

Feature	Very high flow	Excellent surface finish
Polymer type	PA6 (Polyamide 6)	
Processing technology	Injection molding	
Certification	RoHS	EC 1907/2006 (REACH)
Applications	Automotive Applications Outdoor Applications	Handles
Colors available	Black	
Forms	Pellets	

Product identification

ISO 1043 abbreviation	PA6-GF30
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Condition	Standard	Unit	Value
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Physical properties

Molding shrinkage, parallel		ISO 294-4, 2577	%	0.2
Molding shrinkage, normal		ISO 294-4, 2577	%	0.9

Mechanical properties

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Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	10400 / -
Stress at break		ISO 527-1/-2	MPa	160 / -
Strain at break		ISO 527-1/-2	%	2.1 / -
Charpy impact strength, +23°C	+23°C	ISO 179/1eU	kJ/m²	45 / -
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m²	8.1 / -

Thermal properties

Melting temperature, 10°C/min		ISO 11357-1	°C	222
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*: conditioned according to ISO 1110

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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

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