

TECHNICAL DATA SHEET

**TECHNYL STAR AF 219 V30 BK LT**

Polyamide 66, 30% glass fiber reinforced, heat-aging stabilized, high flowability, improved surface finish, for injection molding, black

TECHNYL STAR AF 219 V30 BK LT is a polyamide 6.6, high flow, reinforced with 30% of glass fiber, heat stabilized, for injection molding. One specificity of this grade is to combine a black color and a good transmittance to infra-red wavelength, which makes it suitable for laser welding as a transparent material. This grade offers an excellent combination between thermal and mechanical properties, and it also restricts electrolytic corrosion.

**General**

Feature	Heat-aging stabilized Low halogen content	High flowability, improved surface finish
Polymer type	PA66 (Polyamide 66)	
Processing technology	Injection molding	
Certification	RoHS	EC 1907/2006 (REACH)
Applications	Automotive Applications	General Purpose
Colors available	Black	
Forms	Pellets	

**Product identification**

ISO 1043 abbreviation	PA66-GF30
ISO 16396 designation	PA66,GF30,M1H,S14-100

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

**Physical properties**

Density		ISO 1183	g/cm <sup>3</sup>	1.36
Humidity absorption	T=23°C, 50% RH	ISO 62	%	1.9
Water absorption	24 hr, 23°C	ISO 62	%	1.2
Molding shrinkage, parallel		ISO 294-4, 2577	%	0.3 - 0.35
Molding shrinkage, normal		ISO 294-4, 2577	%	1

TECHNICAL DATA SHEET

TECHNYL STAR AF 219 V30 BK LT

	Condition	Standard	Unit	Value
Mechanical properties				
Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	10100 / 7000
Stress at break		ISO 527-1/-2	MPa	200 / 135
Strain at break		ISO 527-1/-2	%	2.9 / 6
Flexural modulus, ISO 178	2 mm/min	ISO 178	MPa	9400 / 5600
Flexural strength, ISO 178	2 mm/min	ISO 178	MPa	305 / 225
Charpy impact strength, +23°C	+23°C	ISO 179/1eU	kJ/m <sup>2</sup>	63 / 69

**Thermal properties**

Melting temperature, 10°C/min		ISO 11357-1	°C	263
Temp. of deflection under load, 1.80 MPa	1.80 MPa	ISO 75	°C	248

*Test run at 23°C if not differently specified, DAM state (dry as moulded), valid for black products.  
\*: conditioned according to ISO 1110*

**Processing conditions**

Drying temperature/time	80°C
Suggested max moisture	0.2 %
Rear temperature	270 - 280 °C
Middle temperature	275 - 285 °C
Front temperature	280 - 290 °C
Recommended mould temperature	70 - 100 °C

*These parameters are typical of the product but should be related to the type of machinery used and to the type of moulded part.*

**Disclaimer**

The information provided in this documentation corresponds to our technical knowledge at the date of its publication and do not constitute a specification. This information may be subject to revision at our discretion. Domo cannot anticipate all conditions under which this information and our products of other manufacturers in combination with our products may be used. Domo accepts no responsibility for results obtained by the application of this information or for the safety and suitability of our products alone or in combination with other products. Users are advised to make their own tests to determine the safety and suitability of each product or product combination for their own purposes. Unless otherwise agreed in writing, Domo sells the product without warranties. Buyers and users assume all responsibility and liability for loss or damage arising from handling and use of our products, whether used alone or in combination with other products. Unless specifically indicated, the grades mentioned are not suitable for applications in the pharmaceutical/medical sector.