

TECHNICAL DATA SHEET

## TECHNYL A 218 V30 BK 34NG LP

Polyamide 66, 30% glass fiber reinforced, lasermarkable, for injection molding, black

### General

Certifications	RoHS	EC 1907/2006 (REACH)
Polymer type	PA66	
Feature	lasermarkable heat resistant	glycol resistant
Applications	automotive applications	
Colors available	black	
Forms	pellets	
Processing technology	injection moulding	

### Product identification

ISO 1043 abbreviation	PA66-GF30
ISO 16396 designation	PA66,GF30,MO2,S14-100

Condition	Standard	Unit	Value
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### Physical properties

	Condition	Standard	Unit	Value
Density		ISO 1183	g/cm <sup>3</sup>	1.36
Humidity absorption	T=23°C, 50% RH	ISO 62	%	1.7
Water absorption	24 hr, 23°C	ISO 62	%	0.9 - 1.0
Molding shrinkage, parallel		ISO 294-4, 2577	%	0.4
Molding shrinkage, normal		ISO 294-4, 2577	%	1.1

	Condition	Standard	Unit	Value
<b>Mechanical properties</b>				<b>dam / cond.*</b>
Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	10000 / 7500
Stress at break		ISO 527-1/-2	MPa	190 / 135
Strain at break		ISO 527-1/-2	%	3 / 7
Flexural modulus, ISO 178	2 mm/min	ISO 178	MPa	9000 / 6400
Flexural strength, ISO 178	2 mm/min	ISO 178	MPa	290 / 215
Charpy impact strength, +23°C	+23°C	ISO 179/1eU	kJ/m <sup>2</sup>	75 / 85
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m <sup>2</sup>	10 / 15

\*: **conditioned according to ISO 1110**

	Condition	Standard	Unit	Value
<b>Thermal properties</b>				
Melting temperature, 10°C/min		ISO 11357-1	°C	262
Temp. of deflection under load, 0.45 MPa	0.45 MPa	ISO 75	°C	260
Temp. of deflection under load, 1.80 MPa	1.80 MPa	ISO 75	°C	255

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

<b>Processing conditions</b>	
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

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## 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.