

TECHNICAL DATA SHEET

## TECHNYL C 256 V18 NC

### TECHNYL C 256 V18 (EX PSB 197) NATURAL

TECHNYL C 256 V18 NC is a polyamide PA 6 impact modified, reinforced with 18% of glass fibre, for injection moulding. This grade offers high impact strength and good mechanical properties.

#### General

Polymer type	PA6		
Certifications	RoHS	EC 1907/2006 (REACH)	
Feature	high impact resistant		
Applications	sport		
Colors available	black	natural	
Forms	pellets		
Processing technology	injection moulding		

#### Product identification

ISO 1043 abbreviation	PA6-GF18
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Condition	Standard	Unit	Value
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#### Physical properties

	Condition	Standard	Unit	Value
Density		ISO 1183	g/cm <sup>3</sup>	1.23
Molding shrinkage, parallel		ISO 294-4, 2577	%	0.3
Molding shrinkage, normal		ISO 294-4, 2577	%	0.85

	Condition	Standard	Unit	Value
<b>Mechanical properties</b>				<b>dam / cond.*</b>
Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	6000 / 3300
Stress at break		ISO 527-1/-2	MPa	120 / 70
Strain at break		ISO 527-1/-2	%	3.5 / 8.7
Flexural modulus, ISO 178	2 mm/min	ISO 178	MPa	5500 / 3000
Charpy impact strength, +23°C	+23°C	ISO 179/1eU	kJ/m <sup>2</sup>	75 / 80
Charpy impact strength, -30°C	-30°C	ISO 179/1eU	kJ/m <sup>2</sup>	80 / -
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m <sup>2</sup>	13 / 20
Charpy notched impact strength, -30°C	-30°C	ISO 179/1eA	kJ/m <sup>2</sup>	7.5 / -
Izod impact strength, +23°C	+23°C	ISO 180/1U	kJ/m <sup>2</sup>	60 / 65
Izod notched impact strength, +23°C	+23°C	ISO 180/1A	kJ/m <sup>2</sup>	13 / 22
Izod notched impact strength, -30°C	-30°C	ISO 180/1A	kJ/m <sup>2</sup>	13 / -

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

	Condition	Standard	Unit	Value
<b>Thermal properties</b>				
Melting temperature, 10°C/min		ISO 11357-1	°C	222
Temp. of deflection under load, 0.45 MPa	0.45 MPa	ISO 75	°C	215
Temp. of deflection under load, 1.80 MPa	1.80 MPa	ISO 75	°C	192

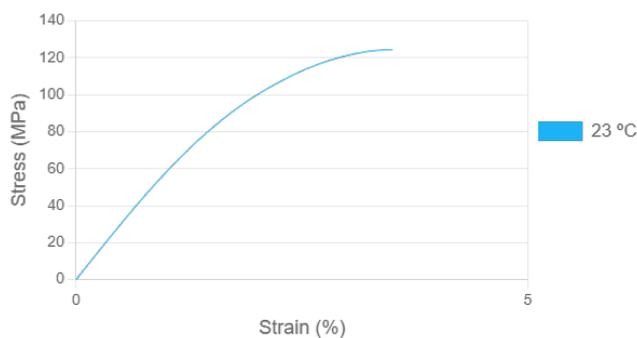
	Condition	Standard	Unit	Value
<b>Burning behaviour</b>				
Flammability, 1.5 mm	1.5 mm	UL 94		HB

	Condition	Standard	Unit	Value
<b>Electrical properties</b>				
Volume resistivity		IEC 62631-3-1	ohm.m	100.0

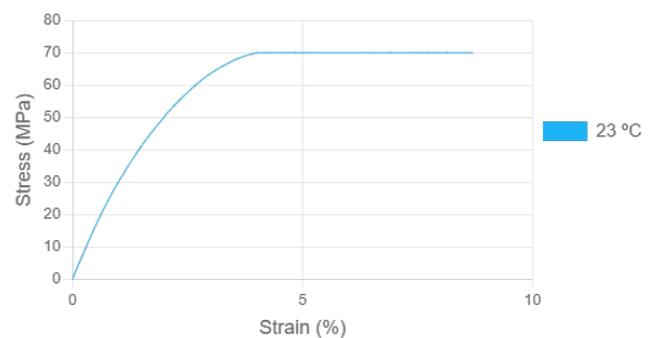
## Processing conditions

Drying temperature/time	80 °C
Suggested max moisture	0.2 %
Rear temperature	230 - 235 °C
Middle temperature	235 - 240 °C
Front temperature	240 - 250 °C
Recommended mould temperature	60 - 90 °C

**Stress-strain, dry**  
Temperature (°C)



**Stress-strain, conditioned**  
Temperature (°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.