TECHNYL®

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TECHNICAL DATA SHEET

TECHNYL C 256 V18 NC

(Previously 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

Feature	High impact resistant	
Polymer type	PA6 (Polyamide 6)	
Processing technology	Injection molding	
Certification	RoHS	EC 1907/2006 (REACH)
Applications	Sport	
Colors available	Black	Natural
Forms	Pellets	

Product identification

ISO 1043 abbreviation	PA6-GF18

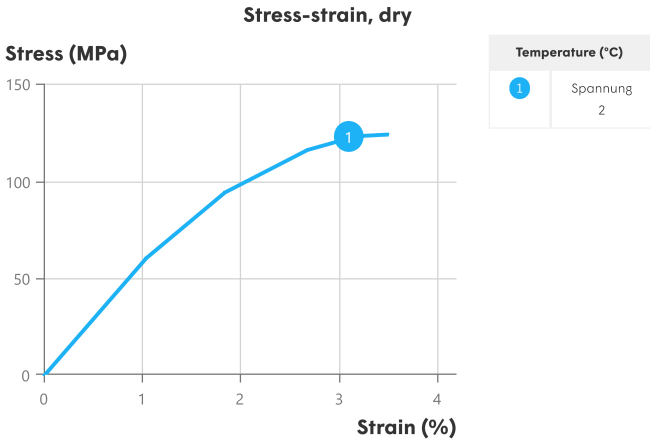
Physical properties

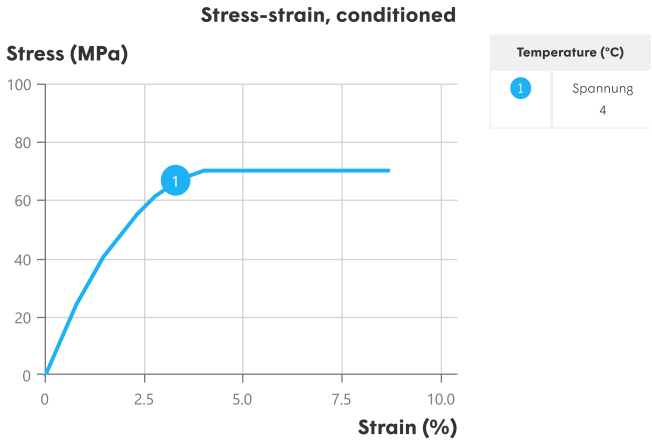
	Condition	Standard	Unit	Value
Density		ISO 1183	g/cm³	1.23
Molding shrinkage, parallel		ISO 294-4, 2577	%	0.3
Molding shrinkage, normal		ISO 294-4, 2577	%	0.85

	Condition	Standard	Unit	Value
Mechanical properties				**dam / cond.***
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/m²	75 / 80
Charpy impact strength, -30°C	-30°C	ISO 179/1eU	kJ/m²	80 / -
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m²	13 / 20
Charpy notched impact strength, -30°C	-30°C	ISO 179/1eA	kJ/m²	7.5 / -
Izod impact strength, +23°C	+23°C	ISO 180/1U	kJ/m²	60 / 65
Izod notched impact strength, +23°C	+23°C	ISO 180/1A	kJ/m²	13 / 22
Izod notched impact strength, -30°C	-30°C	ISO 180/1A	kJ/m²	13 / -
Thermal properties				
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
Electrical properties				
Volume resistivity		IEC 62631-3-1	ohm.m	100
Burning behaviour				
Flammability, 1.5 mm	1.5 mm	UL 94		HB

**: 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 - 250 °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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