

TECHNICAL DATA SHEET

TECHNYL AR 218 V25 BK

TECHNYL AR 218 V25 BK is a polyamide 66, reinforced with 25% of glass fiber, heat stabilized, for injection moulding. It contains recycled materials. This grade offers a good combination between thermal and mechanical properties.

General

Feature	Heat-aging stabilized	
Polymer type	PA66 (Polyamide 66)	
Processing technology	Injection molding	
Certification	RoHS	EC 1907/2006 (REACH)
Applications	Automotive Applications Industrial Applications	Consumer good application General Purpose
Colors available	Black	
Forms	Pellets	

Product identification

ISO 1043 abbreviation	PA66-GF25
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Condition

Standard

Unit

Value

Physical properties

	Condition	Standard	Unit	Value
Density		ISO 1183	g/cm ³	1.32
Water absorption	24 hr, 23°C	ISO 62	%	0.9
Water absorption, saturation			%	6.2

Mechanical properties

dam / cond.*

	Condition	Standard	Unit	Value
Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	7800 / 5000
Stress at break		ISO 527-1/-2	MPa	125 / 95
Strain at break		ISO 527-1/-2	%	2.5 / 10
Flexural modulus, ISO 178	2 mm/min	ISO 178	MPa	7200 / -
Flexural strength, ISO 178	2 mm/min	ISO 178	MPa	200 / -
Charpy impact strength, +23°C	+23°C	ISO 179/1eU	kJ/m ²	40 / -
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m ²	5 / -
Izod notched impact strength, +23°C	+23°C	ISO 180/1A	kJ/m ²	5.5 / -

	Condition	Standard	Unit	Value
Thermal properties				
Melting temperature, 10°C/min		ISO 11357-1	°C	260
Temp. of deflection under load, 1.80 MPa	1.80 MPa	ISO 75	°C	240

Burning behaviour

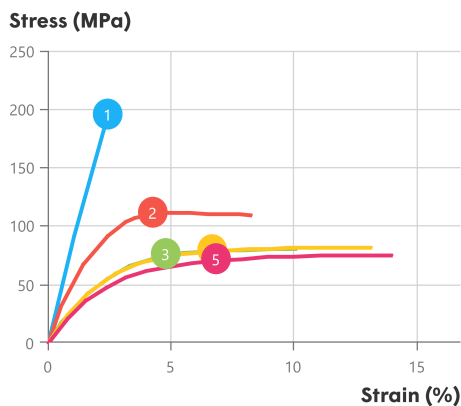
Flammability, 1.5 mm	1.5 mm	UL 94		HB
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**: conditioned according to ISO 1110*

Processing conditions

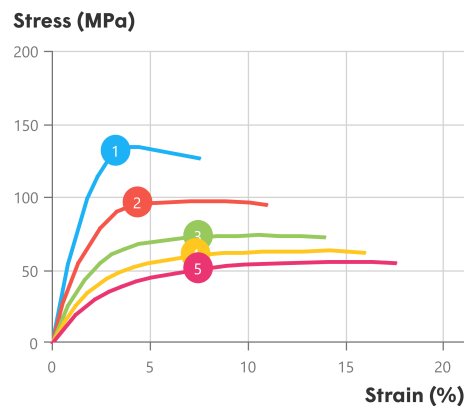
Drying temperature/time	80 °C
Suggested max moisture	0.2 %
Rear temperature	270 - 280 °C
Middle temperature	275 - 285 °C
Front temperature	280 - 290 °C
Recommended mould temperature	70 - 100 °C

Stress-strain, dry



Temperature (°C)	
1	Spannung 1
2	Spannung 3
3	Spannung 4
4	Spannung 5
5	Spannung 6

Stress-strain, conditioned



Temperature (°C)	
1	Spannung 3
2	Spannung 4
3	Spannung 8
4	Spannung 9
5	Spannung 10

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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