

TECHNICAL DATA SHEET

TECHNYL A 218 V40 NC

TECHNYL A 218 V40 NC is a polyamide PA66, reinforced with 40% of glass fibre, heat stabilised for injection moulding. This grade offers an excellent combination between thermal and mechanical properties.

General

Polymer type	PA66
Certifications	RoHS
Feature	heat-aging stabilized
Applications	automotive applications power tool / garden equipment
Colors available	natural
Forms	pellets
Processing technology	injection moulding

Product identification

ISO 1043 abbreviation	PA66-GF40
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Condition	Standard	Unit	Value
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Physical properties

Density		ISO 1183	g/cm ³	1.46
Water absorption	24 hr, 23°C	ISO 62	%	0.7
Molding shrinkage, parallel		ISO 294-4, 2577	%	0.35
Molding shrinkage, normal		ISO 294-4, 2577	%	0.9

	Condition	Standard	Unit	Value
Mechanical properties				dam / cond.*
Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	13000 / -
Stress at break		ISO 527-1/-2	MPa	215 / -
Strain at break		ISO 527-1/-2	%	3 / -
Flexural modulus, ISO 178	2 mm/min	ISO 178	MPa	11000 / -
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m ²	13 / -

*: **conditioned according to ISO 1110**

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

	Condition	Standard	Unit	Value
Burning behaviour				
Flammability, 1.5 mm	1.5 mm	UL 94		HB
Oxygen index			%	23.0

	Condition	Standard	Unit	Value
Electrical properties				
Volume resistivity		IEC 62631-3-1	ohm.m	1.0E13
Surface resistivity		IEC 62631-3-1	ohm	6.0E15
Comparative tracking index	Solution A	IEC 60112	V	400.0
CTI performance level category		Sol A		PLC 1
Dielectric strength	1 mm	IEC 60243-1	kV/mm	35.0

Processing conditions

Drying temperature/time	80 °C
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Processing conditions

Suggested max moisture	0.2 %
Rear temperature	260 - 280 °C
Middle temperature	270 - 300 °C
Front temperature	280 - 310 °C
Recommended mould temperature	60 - 90 °C