

TECHNICAL DATA SHEET

TECHNYL D 219 V50 BK

(Previously TECHNYL EXTEN D 219 V50 BLACK)

TECHNYL D 219 V50 BK is a polyamide 6.10, reinforced with 50% of glass fibre, heat stabilized , for injection moulding.

General

Feature	Heat-aging stabilized	Chemical resistant
Polymer type	PA610 (Polyamide 610)	
Processing technology	Injection molding	
Certification	RoHS	EC 1907/2006 (REACH)
Applications	Connectors	pump / compressor / ventilator
Colors available	Black	
Forms	Pellets	

Product identification

ISO 1043 abbreviation	PA610-GF50
ISO 16396 designation	PA610,GF50,M1H,S14-160

Condition	Standard	Unit	Value
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Physical properties

	Condition	Standard	Unit	Value
Density		ISO 1183	g/cm ³	1.5
Humidity absorption	T=23°C, 50% RH	ISO 62	%	0.24
Water absorption	24 hr, 23°C	ISO 62	%	2
Molding shrinkage, parallel		ISO 294-4, 2577	%	0.35
Molding shrinkage, normal		ISO 294-4, 2577	%	0.8

Mechanical properties

dam / cond.*

	Condition	Standard	Unit	Value
Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	16000 / 12800
Stress at break		ISO 527-1/-2	MPa	200 / 153
Strain at break		ISO 527-1/-2	%	3.6 / 5
Charpy impact strength, +23°C	+23°C	ISO 179/1eU	kJ/m ²	90 / -
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m ²	179 / -
Izod impact strength, +23°C	+23°C	ISO 180/1U	kJ/m ²	15 / -

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	Condition	Standard	Unit	Value
Thermal properties				
Melting temperature, 10°C/min		ISO 11357-1	°C	225
Temp. of deflection under load, 1.80 MPa	1.80 MPa	ISO 75	°C	208

Electrical properties

Volume resistivity		IEC 62631-3-1	ohm.m	3E+015
Surface resistivity		IEC 62631-3-1	ohm	6E+016
Comparative tracking index	Solution A	IEC 60112	V	600
CTI performance level category		Sol A		PLC 0
Dielectric strength	1 mm	IEC 60243-1	kV/mm	26

Burning behaviour

Flammability, 1.5 mm	1.5 mm	UL 94		HB
Flammability, 3.0 mm	3.0 mm	UL 94		HB
Glow-wire flammability index, GWFI	1-3 mm	IEC 60695-2-12	°C	700
Burning rate, FMVSS, Thickness 1 mm		FMVSS 302		<100

Test run at 23°C if not differently specified, DAM state (dry as moulded), valid for black products.
*: conditioned according to ISO 1110

Processing conditions

Drying temperature/time	80°C
Suggested max moisture	0.2 %
Rear temperature	240 - 250 °C
Middle temperature	245 - 255 °C
Front temperature	255 - 265 °C
Recommended mould temperature	60 - 90 °C

These parameters are typical of the product but should be related to the type of machinery used and to the type of moulded part.

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.

Disclaimer

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