

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

Density		ISO 1183	g/cm³	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.*
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/m²	90 / -
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m²	179 / -
Izod impact strength, +23°C	+23°C	ISO 180/1U	kJ/m²	15 / -

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	Condition	Standard	Unit	Value
<b>Thermal properties</b>				
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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