

TECHNICAL DATA SHEET

## TECHNYL D 219 V50 BK

### 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

Polymer type	PA610		
Certifications	RoHS	EC 1907/2006 (REACH)	
Feature	heat-aging stabilized contains renewable content	chemical resistant high stiffness	
Applications	connectors	pump / compressor / ventilator	
Colors available	black		
Forms	pellets		
Processing technology	injection moulding		

#### Product identification

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

Condition	Standard	Unit	Value
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#### Physical properties

		Standard	Unit	Value
Density		ISO 1183	g/cm <sup>3</sup>	1.5
Humidity absorption	T=23°C, 50% RH	ISO 62	%	0.9 - 1.0
Water absorption	24 hr, 23°C	ISO 62	%	0.4 - 0.45
Molding shrinkage, parallel		ISO 294-4, 2577	%	0.3 - 0.4
Molding shrinkage, normal		ISO 294-4, 2577	%	0.7 - 0.9

	Condition	Standard	Unit	Value
<b>Mechanical properties</b>				<b>dam / cond.*</b>
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 <sup>2</sup>	90 / -
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m <sup>2</sup>	179 / -
Izod impact strength, +23°C	+23°C	ISO 180/1U	kJ/m <sup>2</sup>	15 / -

\*: **conditioned according to ISO 1110**

	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

	Condition	Standard	Unit	Value
<b>Burning behaviour</b>				
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 mm/min

Condition	Standard	Unit	Value
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## Electrical properties

Volume resistivity		IEC 62631-3-1	ohm.m	2.6E15
Surface resistivity		IEC 62631-3-1	ohm	6.1E16
Comparative tracking index	Solution A	IEC 60112	V	600.0
CTI performance level category		Sol A		PLC 0
Dielectric strength	1 mm	IEC 60243-1	kV/mm	26.0

## 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

## 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.