

TECHNICAL DATA SHEET

TECHNYL C 218 V40 BK

(Previously DOMAMID 6LVG40H2 BK)

Polyamide 6, 40% glass fiber reinforced, heat-aging stabilized, improved flowability, for injection moulding, black

General

Feature	Heat-aging stabilized	Improved flowability
Polymer type	PA6 (Polyamide 6)	
Processing technology	Injection molding	
Certification	RoHS	

Product identification

ISO 1043 abbreviation	PA6-GF40
ISO 16396 designation	PA6,GF40,M1H,S12-120

Condition	Standard	Unit	Value
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Physical properties

Condition	Standard	Unit	Value	
Density	ISO 1183	g/cm ³	1.45	
Humidity absorption	T=23°C, 50% RH	ISO 62	%	1.7 - 2
Water absorption	24 hr, 23°C	ISO 62	%	5.5 - 6
Molding shrinkage, parallel		ISO 294-4, 2577	%	0.15 - 0.35
Molding shrinkage, normal		ISO 294-4, 2577	%	0.65 - 0.85
Viscosity number	96% H2SO4	ISO 307	cm ³ /g	125

Mechanical properties

Condition	Standard	Unit	Value	
Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	12500 / 8000
Stress at break	5 mm/min	ISO 527-1/-2	MPa	200 / 140
Strain at break	5 mm/min	ISO 527-1/-2	%	3 / 5
Flexural modulus, ISO 178	2 mm/min	ISO 178	MPa	11500 / 7000
Flexural strength, ISO 178	2 mm/min	ISO 178	MPa	300 / 210
Charpy impact strength, +23°C	+23°C	ISO 179/1eU	kJ/m ²	90 / 105
Charpy impact strength, -30°C	-30°C	ISO 179/1eU	kJ/m ²	85 / 100
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m ²	15 / 24
Charpy notched impact strength, -30°C	-30°C	ISO 179/1eA	kJ/m ²	11 / 13

	Condition	Standard	Unit	Value
Thermal properties				
Melting temperature, 10°C/min		ISO 11357-1	°C	221
Temp. of deflection under load, 0.45 MPa	0.45 MPa	ISO 75	°C	220
Temp. of deflection under load, 1.80 MPa	1.80 MPa	ISO 75	°C	210

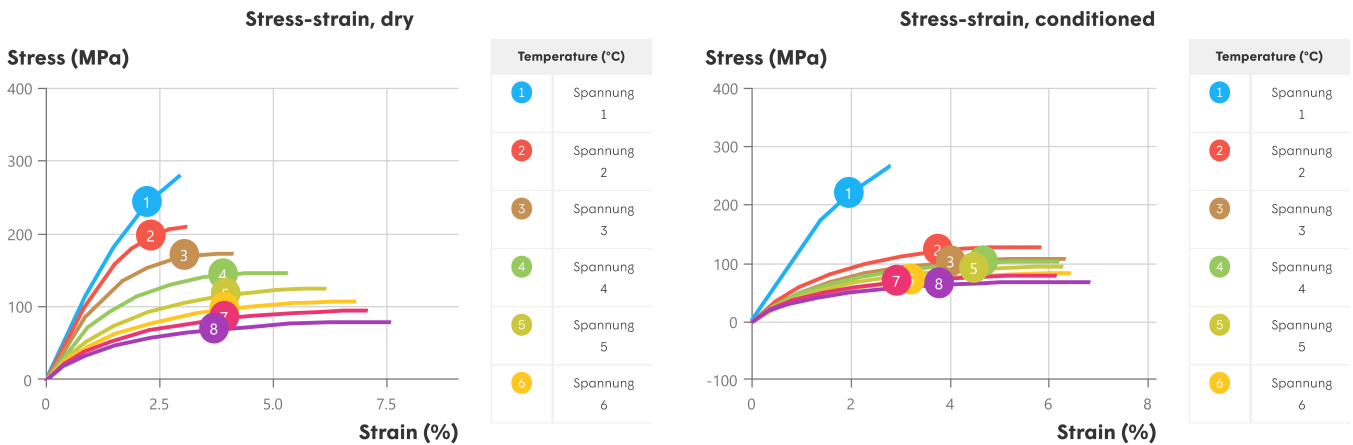
Electrical properties				
Volume resistivity		IEC 62631-3-1	ohm.m	1E+016
Surface resistivity		IEC 62631-3-1	ohm	1E+014

Burning behaviour				
Burning rate, FMVSS, Thickness 1 mm		FMVSS 302		< 100 mm/min

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

Processing conditions	
Drying temperature/time	75-85°C / 2-4h (with dew point of dried air < -30 °C)
Recommended melt temperature	240 - 280 °C
Recommended mould temperature	80 - 100 °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.



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