

TECHNICAL DATA SHEET

TECHNYL C 218 V50 NC

(Previously DOMAMID 6LVG50H2 NC)

Polyamide 6, 50% glass fiber reinforced, heat-aging stabilized, improved flowability, for injection moulding, natural color

General

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

Product identification

ISO 16396 designation	PA6,GF50,M1H,S12-160
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Condition	Standard	Unit	Value
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Physical properties

	Condition	Standard	Unit	Value
Density		ISO 1183	g/cm ³	1.58
Humidity absorption	T=23°C, 50% RH	ISO 62	%	1.3 - 1.6
Water absorption	24 hr, 23°C	ISO 62	%	4.5 - 5.1
Molding shrinkage, parallel		ISO 294-4, 2577	%	0.2 - 0.4
Molding shrinkage, normal		ISO 294-4, 2577	%	0.65 - 0.85
Viscosity number	96% H2SO4	ISO 307	cm ³ /g	125

Mechanical properties

dam / cond.*

	Condition	Standard	Unit	Value
Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	16000 / 10500
Stress at break		ISO 527-1/-2	MPa	230 / 145
Strain at break		ISO 527-1/-2	%	3 / 5
Flexural modulus, ISO 178	2 mm/min	ISO 178	MPa	12500 / 9500
Flexural strength, ISO 178	2 mm/min	ISO 178	MPa	370 / 245
Charpy impact strength, +23°C	+23°C	ISO 179/1eU	kJ/m ²	95 / 95
Charpy impact strength, -30°C	-30°C	ISO 179/1eU	kJ/m ²	95 / 95
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m ²	18 / 28
Charpy notched impact strength, -30°C	-30°C	ISO 179/1eA	kJ/m ²	14 / 16

	Condition	Standard	Unit	Value
Thermal properties				
Melting temperature, 10°C/min		ISO 11357-1	°C	221

Burning behaviour

Burning rate, FMVSS, Thickness 1 mm		FMVSS 302		< 100 mm/min
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*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	250 - 290 °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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