

TECHNICAL DATA SHEET

## TECHNYL C 218 V50 NC

### DOMAMID 6LVG50H2 NC

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

#### General

Certifications	RoHS	EC 1907/2006 (REACH)
Polymer type	PA6	
Feature	heat-aging stabilized	high stiffness
Processing technology	injection moulding	

#### Product identification

ISO 16396 designation	PA6,GF50,MH,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 <sup>3</sup>	1.58
Humidity absorption	T=23°C, 50% RH	ISO 62	%	1.9 - 2.3
Water absorption	24 hr, 23°C	ISO 62	%	1.3 - 1.4
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 <sup>3</sup> /g	125.0

	Condition	Standard	Unit	Value
<b>Mechanical properties</b>				<b>dam / cond.*</b>
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 <sup>2</sup>	95 / 95
Charpy impact strength, -30°C	-30°C	ISO 179/1eU	kJ/m <sup>2</sup>	95 / 95
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m <sup>2</sup>	18 / 28
Charpy notched impact strength, -30°C	-30°C	ISO 179/1eA	kJ/m <sup>2</sup>	14 / 16

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

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

	Condition	Standard	Unit	Value
<b>Burning behaviour</b>				
Burning rate, FMVSS, Thickness 1 mm		FMVSS 302		< 100 mm/min

<b>Processing conditions</b>			
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		

### 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.

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## Injection advice

For reinforced polyamides, Domo recommends the use of steel with a high content of carbon, and purified for polishing, to avoid or limit the abrasion. For example: X38CrMoV5-1 (EN Norm) - 1.2367 /1.2343 (DIN Norm) or X160CrMoV12 (EN Norm) - 1.2601 /1.2379 (DIN Norm). In the case of high requirements on surface quality a mould temperature of up to 120°C can be considered.,The processing parameters like processing temperatures are a recommendation and can be adjusted in function of injection machine size, part geometry / design.