

TECHNICAL DATA SHEET

TECHNYL C 116S V30 BK 21N

(Previously DOMAMID 6LVG30 300 BK99)

Polyamide 6, 30% glass fiber reinforced, improved flowability, for injection moulding, black

General

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

Product identification

ISO 1043 abbreviation	PA6-GF30
ISO 16396 designation	PA6,GF30,M1,S12-090

Condition	Standard	Unit	Value
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Physical properties

Condition	Standard	Unit	Value	
Density	ISO 1183	g/cm ³	1.36	
Humidity absorption	T=23°C, 50% RH	ISO 62	%	2 - 2.5
Water absorption	24 hr, 23°C	ISO 62	%	6.3 - 6.9
Molding shrinkage, parallel		ISO 294-4, 2577	%	0.2 - 0.4
Molding shrinkage, normal		ISO 294-4, 2577	%	0.7 - 0.9
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	9500 / 6000
Stress at break	5 mm/min	ISO 527-1/-2	MPa	175 / 110
Strain at break	5 mm/min	ISO 527-1/-2	%	3 / 7
Flexural modulus, ISO 178	2 mm/min	ISO 178	MPa	7500 / 4600
Charpy impact strength, +23°C	+23°C	ISO 179/1eU	kJ/m ²	80 / 85
Charpy impact strength, -30°C	-30°C	ISO 179/1eU	kJ/m ²	55 / -
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m ²	13 / 25
Charpy notched impact strength, -30°C	-30°C	ISO 179/1eA	kJ/m ²	10 / -
Izod notched impact strength, +23°C	+23°C	ISO 180/1A	kJ/m ²	11 / -

	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	215
Temp. of deflection under load, 1.80 MPa	1.80 MPa	ISO 75	°C	205

Electrical properties				
Volume resistivity		IEC 62631-3-1	ohm.m	1E+013
Surface resistivity		IEC 62631-3-1	ohm	1E+013

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	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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