

TECHNICAL DATA SHEET

TECHNYL C 236 V20 NC

(Previously DOMAMID 6G20 500)

Polyamide 6, 20% glass fiber reinforced, improved impact resistance, for injection moulding

General

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

Product identification

ISO 1043 abbreviation	PA6-I-GF20
ISO 16396 designation	PA6-I,GF20,M1,S14-070

	Condition	Standard	Unit	Value
Physical properties				
Density		ISO 1183	g/cm ³	1.25
Molding shrinkage, parallel		ISO 294-4, 2577	%	0.4 - 0.6
Molding shrinkage, normal		ISO 294-4, 2577	%	0.8 - 1
Viscosity number	96% H2SO4	ISO 307	cm ³ /g	145

Mechanical properties

				dam / cond.*
Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	6700 / 4700
Stress at break	5 mm/min	ISO 527-1/-2	MPa	130 / 90
Strain at break	5 mm/min	ISO 527-1/-2	%	4 / 7.5
Flexural modulus, ISO 178	2 mm/min	ISO 178	MPa	5800 / -
Flexural strength, ISO 178	2 mm/min	ISO 178	MPa	190 / -
Charpy impact strength, +23°C	+23°C	ISO 179/1eU	kJ/m ²	75 / 110
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m ²	15 / 25
Izod impact strength, +23°C	+23°C	ISO 180/1U	kJ/m ²	70 / 110
Izod notched impact strength, +23°C	+23°C	ISO 180/1A	kJ/m ²	14 / 25

	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	210
Temp. of deflection under load, 1.80 MPa	1.80 MPa	ISO 75	°C	195
Vicat softening temperature	50°C/h - 50N	ISO 306	°C	205

Electrical properties

Volume resistivity		IEC 62631-3-1	ohm.m	1E+013
Surface resistivity		IEC 62631-3-1	ohm	1E+013
Comparative tracking index	Solution A	IEC 60112	V	500
CTI performance level category		Sol A		PLC 1

Burning behaviour

Flammability, 0.75 mm	0.75 mm	UL 94		HB
Glow-wire flammability index, GWFI	1-3 mm	IEC 60695-2-12	°C	650
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), valid for natural colored products.
: 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 - 260 °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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