

TECHNICAL DATA SHEET

TECHNYL C 216 S20 V10 BK

(Previously DOMAMID 6GB3010 300 BK)

Polyamide 6, 30% glass fiber and glass beads, for injection moulding, black

General

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

Product identification

ISO 1043 abbreviation	PA6-(GF10+GB20)
ISO 16396 designation	PA6,(GF+GB)30,M1,S14-060

Condition	Standard	Unit	Value
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Physical properties

Condition	Standard	Unit	Value	
Density	ISO 1183	g/cm ³	1.34	
Humidity absorption	T=23°C, 50% RH	ISO 62	%	2.2
Molding shrinkage, parallel	ISO 294-4, 2577	%	0.6 - 0.8	
Molding shrinkage, normal	ISO 294-4, 2577	%	1.1 - 1.3	
Melt volume-flow rate, MVR, 5.0 kg	275°C, 5kg	ISO 1133	cm ³ /10 min	55
Viscosity number	96% H2SO4	ISO 307	cm ³ /g	145

Mechanical properties

dam / cond.*

Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	5900 / 3500
Stress at break	50 mm/min	ISO 527-1/-2	MPa	110 / 65
Strain at break	50 mm/min	ISO 527-1/-2	%	3.5 / 15
Flexural modulus, ISO 178	2 mm/min	ISO 178	MPa	4800 / 2800
Flexural strength, ISO 178	2 mm/min	ISO 178	MPa	170 / 80
Charpy impact strength, +23°C	+23°C	ISO 179/1eU	kJ/m ²	30 / 80
Charpy impact strength, -30°C	-30°C	ISO 179/1eU	kJ/m ²	30 / -
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m ²	4 / 12
Charpy notched impact strength, -30°C	-30°C	ISO 179/1eA	kJ/m ²	3.5 / -

	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	200
Temp. of deflection under load, 1.80 MPa	1.80 MPa	ISO 75	°C	150

Electrical properties

Volume resistivity		IEC 62631-3-1	ohm.m	1E+015
Surface resistivity		IEC 62631-3-1	ohm	1E+014

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	240 - 260 °C
Recommended mould temperature	80 - 90 °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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