

TECHNICAL DATA SHEET

TECHNYL C 216 V30 BK 103 D

(Previously DOMAMID 6G30 103 BK)

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

General

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

Product identification

ISO 1043 abbreviation	PA6-GF30
ISO 16396 designation	PA6,GF30,M1,S14-090

	Condition	Standard	Unit	Value
Physical properties				
Density		ISO 1183	g/cm ³	1.36
Molding shrinkage, parallel		ISO 294-4, 2577	%	0.25 - 0.45
Molding shrinkage, normal		ISO 294-4, 2577	%	1 - 1.2
Melt volume-flow rate, MVR, 5.0 kg	275°C, 5kg	ISO 1133	cm ³ /10 min	37
Viscosity number	96% H2SO4	ISO 307	cm ³ /g	145

Mechanical properties

				dam / cond.*
Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	9500 / -
Stress at break	5 mm/min	ISO 527-1/-2	MPa	155 / -
Strain at break	5 mm/min	ISO 527-1/-2	%	2.5 / -
Flexural modulus, ISO 178	2 mm/min	ISO 178	MPa	7500 / -
Charpy impact strength, +23°C	+23°C	ISO 179/1eU	kJ/m ²	65 / -
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m ²	8.5 / -
Charpy notched impact strength, -30°C	-30°C	ISO 179/1eA	kJ/m ²	9 / -

	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	220
Temp. of deflection under load, 1.80 MPa	1.80 MPa	ISO 75	°C	210
Vicat softening temperature	50°C/h - 50N	ISO 306	°C	214

Electrical properties

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