

TECHNICAL DATA SHEET

TECHNYL C 226 BK

(Previously DOMAMID 6N1 BK)

Polyamide 6, nucleated, for injection moulding, black

General

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

Product identification

ISO 1043 abbreviation	PA6
ISO 16396 designation	PA6,M1,S14-030

	Condition	Standard	Unit	Value
Physical properties				
Density		ISO 1183	g/cm ³	1.13
Humidity absorption	T=23°C, 50% RH	ISO 62	%	3.3 - 3.4
Water absorption	24 hr, 23°C	ISO 62	%	1.9 - 2
Water absorption, saturation			%	9.1
Molding shrinkage, parallel		ISO 294-4, 2577	%	1.2 - 1.4
Molding shrinkage, normal		ISO 294-4, 2577	%	1.2 - 1.4
Viscosity number	96% H2SO4	ISO 307	cm ³ /g	145

Mechanical properties

				dam / cond.*
Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	3300 / 1300
Yield stress	50 mm/min	ISO 527-1/-2	MPa	80 / 40
Yield strain	50 mm/min	ISO 527-1/-2	%	4.5 / 20
Flexural modulus, ISO 178	2 mm/min	ISO 178	MPa	2700 / 850
Flexural strength, ISO 178	2 mm/min	ISO 178	MPa	105 / 30
Charpy impact strength, +23°C	+23°C	ISO 179/1eU		NB / NB
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m ²	4.5 / 20
Charpy notched impact strength, -30°C	-30°C	ISO 179/1eA	kJ/m ²	2.5 / -

	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	155
Temp. of deflection under load, 1.80 MPa	1.80 MPa	ISO 75	°C	65
Vicat softening temperature	50°C/h - 50N	ISO 306	°C	200

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
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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 - 280 °C
Recommended mould temperature	60 - 80 °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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