+135-3858-6433 (GuangDong)
+188-1699-6168 (ShangHai)
+852-6957-5415 (HongKong)

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TECHNICAL DATA SHEET

TECHNYL C 218M BK

(Previously DOMAMID 6I1H2 BK)

Polyamide 6, heat-aging stabilized, impact modified, for injection moulding, black

General

Feature	Heat-aging stabilized	Impact modified
Polymer type	PA6 (Polyamide 6)	
Processing technology	Injection molding	
Certification	RoHS	EC 1907/2006 (REACH)
Colors available	Black	Natural
Forms	Pellets	

Product identification

ISO 1043 abbreviation	PA6-I
ISO 16396 designation	PA6-I,M1H,S14-030

Physical properties

	Condition	Standard	Unit	Value
Density		ISO 1183	g/cm³	1.11
Humidity absorption	T=23°C, 50% RH	ISO 62	%	2.8 - 3.2
Water absorption, saturation			%	9
Molding shrinkage, parallel		ISO 294-4, 2577	%	1.5 - 1.7
Molding shrinkage, normal		ISO 294-4, 2577	%	1.5 - 1.7

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	Condition	Standard	Unit	Value
Mechanical properties				**dam / cond.***
Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	2600 / 850
Strain at break		ISO 527-1/-2	%	15 / 40
Yield stress	50 mm/min	ISO 527-1/-2	MPa	65 / 40
Yield strain	50 mm/min	ISO 527-1/-2	%	4 / 20
Flexural modulus, ISO 178	2 mm/min	ISO 178	MPa	2300 / 900
Flexural strength, ISO 178	2 mm/min	ISO 178	MPa	90 / 30
Charpy impact strength, +23°C	+23°C	ISO 179/1eU		NB / NB
Charpy impact strength, -30°C	-30°C	ISO 179/1eU		NB / NB
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m²	9 / 35
Charpy notched impact strength, -30°C	-30°C	ISO 179/1eA	kJ/m²	6 / NB
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	165
Temp. of deflection under load, 1.80 MPa	1.80 MPa	ISO 75	°C	60
Vicat softening temperature	50°C/h - 50N	ISO 306	°C	190
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	575
CTI performance level category		Sol A		PLC 1
Burning behaviour				
Flammability, 0.75 mm	0.75 mm	UL 94		HB
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	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.

Processing conditions

Disclaimer

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