

TECHNICAL DATA SHEET

TECHNYL 4EARTH C5E 236 MT10 BK
(Previously DOMAMID R 6M10 500 BK)

Polyamide 6, 10% mineral filler, 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-MD10
ISO 16396 designation	PA6-I,MD10(R50),M1,S14-030

	Condition	Standard	Unit	Value
Physical properties				
Density		ISO 1183	g/cm ³	1.2
Molding shrinkage, parallel		ISO 294-4, 2577	%	1.1 - 1.3
Molding shrinkage, normal		ISO 294-4, 2577	%	1.2 - 1.4
Melt volume-flow rate, MVR, 5.0 kg	275°C, 5kg	ISO 1133	cm ³ /10 min	90
Viscosity number	96% H2SO4	ISO 307	cm ³ /g	145

Mechanical properties

				dam / cond.*
Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	3200 / -
Strain at break	5 mm/min	ISO 527-1/-2	%	50 / -
Yield stress	50 mm/min	ISO 527-1/-2	MPa	70 / -
Flexural modulus, ISO 178	2 mm/min	ISO 178	MPa	3000 / -
Flexural strength, ISO 178	2 mm/min	ISO 178	MPa	100 / -
Charpy impact strength, +23°C	+23°C	ISO 179/1eU	kJ/m ²	NB / -
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m ²	8 / -
Izod impact strength, +23°C	+23°C	ISO 180/1U	kJ/m ²	NB / -
Izod notched impact strength, +23°C	+23°C	ISO 180/1A	kJ/m ²	8 / -

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	Condition	Standard	Unit	Value
Thermal properties				
Melting temperature, 10°C/min		ISO 11357-1	°C	221

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

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), valid for black 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 - 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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