

TECHNICAL DATA SHEET

TECHNYL 4EARTH C2E 218S MV30 BK 21N H
(Previously ECONAMID FL 6GM3010H2 212 BK99)

Polyamide 6, 30% glass fiber and mineral filler, heat-aging stabilized, for injection moulding

General

Feature	Heat-aging stabilized
Polymer type	PA6 (Polyamide 6)
Processing technology	Injection molding
Certification	RoHS

Product identification

ISO 1043 abbreviation	PA6-(GF10+MD20)
ISO 16396 designation	PA6,(GF+MD)30(R100),M1H,S14-080

Physical properties

	Condition	Standard	Unit	Value
Density		ISO 1183	g/cm³	1.37
Molding shrinkage, parallel		ISO 294-4, 2577	%	0.2 - 0.4
Molding shrinkage, normal		ISO 294-4, 2577	%	0.4 - 0.6
Viscosity number	96% H2SO4	ISO 307	cm³/g	135

Mechanical properties

				dam / cond.*
Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	7800 / 3600
Stress at break	5 mm/min	ISO 527-1/-2	MPa	90 / 45
Strain at break	5 mm/min	ISO 527-1/-2	%	2.5 / 12
Flexural modulus, ISO 178	2 mm/min	ISO 178	MPa	7000 / 3700
Flexural strength, ISO 178	2 mm/min	ISO 178	MPa	145 / 90
Charpy impact strength, +23°C	+23°C	ISO 179/1eU	kJ/m²	35 / -
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m²	5 / -
Izod impact strength, +23°C	+23°C	ISO 180/1U	kJ/m²	30 / -
Izod notched impact strength, +23°C	+23°C	ISO 180/1A	kJ/m²	5 / -

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	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	210
Temp. of deflection under load, 1.80 MPa	1.80 MPa	ISO 75	°C	180
Vicat softening temperature	50°C/h - 50N	ISO 306	°C	200

Electrical properties

Volume resistivity		IEC 62631-3-1	ohm.m	1E+016
Surface resistivity		IEC 62631-3-1	ohm	1E+014

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 - 270 °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. These TECHNYL grades are not recommended for injection moulding hot runner systems with a diameter below 1mm.

Disclaimer

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