

TECHNICAL DATA SHEET

TECHNYL 4EARTH C2E 216 V40 BK
(Previously ECONAMID PLUS 6G40 BK)

Polyamide 6, 40% 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-GF40
ISO 16396 designation	PA6,GF40(R>50),M1,S14-120

	Condition	Standard	Unit	Value
Density		ISO 1183	g/cm³	1.47

Physical properties

Mechanical properties				dam / cond.*
Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	12100 / -
Stress at break	5 mm/min	ISO 527-1/-2	MPa	165 / -
Strain at break	5 mm/min	ISO 527-1/-2	%	3 / -
Charpy impact strength, +23°C	+23°C	ISO 179/1eU	kJ/m²	65 / -
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m²	11 / -
Izod impact strength, +23°C	+23°C	ISO 180/1U	kJ/m²	60 / -
Izod notched impact strength, +23°C	+23°C	ISO 180/1A	kJ/m²	11 / -

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	215
Temp. of deflection under load, 1.80 MPa	1.80 MPa	ISO 75	°C	205
Vicat softening temperature	50°C/h - 50N	ISO 306	°C	210

Electrical properties

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

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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	230 - 260 °C
Recommended mould temperature	60 - 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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