

TECHNICAL DATA SHEET

TECHNYL4EARTH C2E 216 V20 BK 9039

(Previously ECONAMID PLUS 6G20 BK99039)

Polyamide 6, 20% 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-GF20
ISO 16396 designation	PA6,GF20(R>50),M1,S14-070

	Condition	Standard	Unit	Value
Physical properties				
Density		ISO 1183	g/cm ³	1.26
Viscosity number	96% H2SO4	ISO 307	cm ³ /g	135

Mechanical properties

				dam / cond.*
Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	6800 / -
Stress at break	5 mm/min	ISO 527-1/-2	MPa	130 / -
Flexural modulus, ISO 178	2 mm/min	ISO 178	MPa	6100 / -
Flexural strength, ISO 178	2 mm/min	ISO 178	MPa	190 / -
Charpy impact strength, +23°C	+23°C	ISO 179/1eU	kJ/m ²	30 / -
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m ²	5.5 / -
Izod impact strength, +23°C	+23°C	ISO 180/1U	kJ/m ²	25 / -
Izod notched impact strength, +23°C	+23°C	ISO 180/1A	kJ/m ²	4.5 / -

Thermal properties

Melting temperature, 10°C/min		ISO 11357-1	°C	221
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Electrical properties

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

	Condition	Standard	Unit	Value
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. These TECHNYL grades are not recommended for injection moulding hot runner systems with a diameter below 1mm.

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