

TECHNICAL DATA SHEET

TECHNYL 4EARTH C5E 236 V20 BK
(Previously ECONAMID PLUS 6G20 500 BK)

Polyamide 6, 20% glass fiber reinforced, improved impact resistance, for injection moulding, black

General

Feature	Improved impact resistance		
Polymer type	PA6 (Polyamide 6)		
Processing technology	Injection molding		
Certification	RoHS	EC 1907/2006 (REACH)	
Colors available	Black		
Forms	Pellets		

Product identification

ISO 1043 abbreviation	PA6-I-GF20		
ISO 16396 designation	PA6-I,GF20(R>50),M1,S14-060		

Condition	Standard	Unit	Value
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Physical properties

	Condition	Standard	Unit	Value
Density		ISO 1183	g/cm ³	1.25
Viscosity number	96% H2SO4	ISO 307	cm ³ /g	135

Mechanical properties

dam / cond.*

	Condition	Standard	Unit	Value
Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	6500 / -
Stress at break	5 mm/min	ISO 527-1/-2	MPa	120 / -
Flexural modulus, ISO 178	2 mm/min	ISO 178	MPa	6000 / -
Flexural strength, ISO 178	2 mm/min	ISO 178	MPa	180 / -
Charpy impact strength, +23°C	+23°C	ISO 179/1eU	kJ/m ²	55 / -
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m ²	9 / -
Izod impact strength, +23°C	+23°C	ISO 180/1U	kJ/m ²	45 / -
Izod notched impact strength, +23°C	+23°C	ISO 180/1A	kJ/m ²	8 / -

Thermal properties

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

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

Disclaimer

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