

TECHNICAL DATA SHEET

TECHNYL 4EARTH C2E 216 V25 BK
ECONAMID PLUS 6G25 BK



Polyamide 6, 25% glass fiber reinforced, for injection moulding, black

General

Certifications	RoHS
Polymer type	PA6
Feature	recycled not heat stabilized
Processing technology	injection moulding

Product identification

ISO 1043 abbreviation	PA6(REC)-GF25
ISO 16396 designation	PA6,GF25(R>50),M,S14-080

Condition	Standard	Unit	Value
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Physical properties

Density		ISO 1183	g/cm ³	1.32
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Condition	Standard	Unit	Value
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Mechanical properties

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Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	8000 / -
Stress at break	5 mm/min	ISO 527-1/-2	MPa	135 / -
Strain at break	5 mm/min	ISO 527-1/-2	%	3 / -
Izod notched impact strength, +23°C	+23°C	ISO 180/1A	kJ/m ²	5 / -
Rockwell hardness		ISO 2039/2	ScaleR	120 / -

*: conditioned according to ISO 1110

Condition	Standard	Unit	Value
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Thermal properties

Condition	Standard	Unit	Value
Melting temperature, 10°C/min	ISO 11357-1	°C	221
Temp. of deflection under load, 0.45 MPa	ISO 75	°C	215
Temp. of deflection under load, 1.80 MPa	ISO 75	°C	205
Vicat softening temperature	ISO 306	°C	210

Condition	Standard	Unit	Value
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Burning behaviour

Condition	Standard	Unit	Value
Flammability, 0.75 mm	UL 94		HB
Burning rate, FMVSS, Thickness 1 mm	FMVSS 302		< 100 mm/min

Condition	Standard	Unit	Value
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Electrical properties

Condition	Standard	Unit	Value
Volume resistivity	IEC 62631-3-1	ohm.m	1.0E13
Surface resistivity	IEC 62631-3-1	ohm	1.0E13

Processing conditions

Drying temperature/time	75-85°C / 2-4h (with dew point of dried air < -30 °C)
Recommended melt temperature	235 - 275 °C
Recommended mould temperature	70 - 120 °C

processing conditions

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.

Injection notes

The material is supplied in airtight bags, ready for use. In case that the virgin material has absorbed moisture, it must be dried with a dehumidified air drying equipment, dew point minimum -20°C. Recommended time 2-4h.

Injection advice

For reinforced polyamides, Domo recommends the use of steel with a high content of carbon, and purified for polishing, to avoid or limit the abrasion. For example: X38CrMoV5-1 (EN Norm) - 1.2367 /1.2343 (DIN Norm) or X160CrMoV12 (EN Norm) - 1.2601 /1.2379 (DIN Norm). In the case of high requirements on surface quality a mould temperature of up to 120°C can be

Injection advice

considered.,The processing parameters like processing temperatures are a recommendation and can be adjusted in function of injection machine size, part geometry / design.