

TECHNICAL DATA SHEET

TECHNYL 4EARTH C2E 218 V40 BK
ECONAMID PLUS 6G40H2 BK



Recycled polyamide 6, 40% glass fiber reinforced, for injection moulding, black

General

Certifications	RoHS	
Polymer type	PA6	
Feature	heat-aging stabilized recycled	good stiffness
Processing technology	injection moulding	

Product identification

ISO 1043 abbreviation	PA6-GF40
ISO 16396 designation	PA6,GF40(R>55),MH,S14-120

Condition	Standard	Unit	Value
-----------	----------	------	-------

Physical properties

Property	Condition	Standard	Unit	Value
Density		ISO 1183	g/cm ³	1.47
Humidity absorption	T=23°C, 50% RH	ISO 62	%	1.9 - 2.3
Water absorption	24 hr, 23°C	ISO 62	%	1.3 - 1.4

	Condition	Standard	Unit	Value
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/m ²	65 / -
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m ²	11 / -
Izod impact strength, +23°C	+23°C	ISO 180/1U	kJ/m ²	60 / -
Izod notched impact strength, +23°C	+23°C	ISO 180/1A	kJ/m ²	11 / -

*: **conditioned according to ISO 1110**

	Condition	Standard	Unit	Value
Thermal properties				
Melting temperature, 10°C/min		ISO 11357-1	°C	221
Vicat softening temperature	50°C/h - 50N	ISO 306	°C	210

	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

	Condition	Standard	Unit	Value
Electrical properties				
Volume resistivity		IEC 62631-3-1	ohm.m	1.0E16
Surface resistivity		IEC 62631-3-1	ohm	1.0E14

Processing conditions	
Drying temperature/time	75-85°C / 2-4h (with dew point of dried air < -30 °C)
Recommended melt temperature	230 - 260 °C

Processing conditions

Recommended mould temperature	60 - 100 °C
-------------------------------	-------------

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