

TECHNICAL DATA SHEET

**TECHNYL 4EARTH C2E 216 V20 NC**  
**ECONAMID PLUS 6G20 NC**



Polyamide 6, 20% glass fiber reinforced, for injection moulding, natural

**General**

Certifications	RoHS	EC 1907/2006 (REACH)
Polymer type	PA6	
Feature	recycled	
Applications	consumer applications	
Colors available	black grey	natural
Forms	pellets	
Processing technology	injection moulding	

**Product identification**

ISO 1043 abbreviation	PA6(REC)-GF20
ISO 16396 designation	PA6,GF20(R>50),M,S14-070

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

**Physical properties**

	Condition	Standard	Unit	Value
Density		ISO 1183	g/cm <sup>3</sup>	1.26
Water absorption	24 hr, 23°C	ISO 62	%	2.4 - 2.6
Water absorption, saturation			%	6.5
Viscosity number	96% H2SO4	ISO 307	cm <sup>3</sup> /g	135.0

	Condition	Standard	Unit	Value
<b>Mechanical properties</b>				<b>dam / cond.*</b>
Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	6800 / -
Stress at break		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 <sup>2</sup>	30 / -
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m <sup>2</sup>	5.5 / -
Izod impact strength, +23°C	+23°C	ISO 180/1U	kJ/m <sup>2</sup>	25 / -
Izod notched impact strength, +23°C	+23°C	ISO 180/1A	kJ/m <sup>2</sup>	4.5 / -

\*: **conditioned according to ISO 1110**

	Condition	Standard	Unit	Value
<b>Thermal properties</b>				
Melting temperature, 10°C/min		ISO 11357-1	°C	221

	Condition	Standard	Unit	Value
<b>Burning behaviour</b>				
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
<b>Electrical properties</b>				
Volume resistivity		IEC 62631-3-1	ohm.m	1.0E13
Surface resistivity		IEC 62631-3-1	ohm	1.0E13

<b>Processing conditions</b>				
Drying temperature/time	75-85°C / 2-4h (with dew point of dried air < -30 °C)			
Suggested max moisture	0.2 %			

### Processing conditions

Recommended melt temperature	240 - 260 °C
Recommended mould temperature	80 - 90 °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.