

TECHNICAL DATA SHEET

**TECHNYL 4EARTH C5E 236 V18 BK H**  
**ECONAMID FL 6G18 500**



Recycled polyamide 6, 18% glass fiber reinforced, improved impact resistance, for injection moulding, black

**General**

Polymer type	PA6		
Certifications	RoHS	EC 1907/2006 (REACH)	
Feature	impact modified not heat stabilized	recycled	
Colors available	black		
Forms	pellets		
Processing technology	injection moulding		

**Product identification**

ISO 1043 abbreviation	PA6-I(REC)-GF18
ISO 16396 designation	PA6-I,GF18(R100),M,S14-050

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

**Physical properties**

Density		ISO 1183	g/cm <sup>3</sup>	1.24
---------	--	----------	-------------------	------

	Condition	Standard	Unit	Value
<b>Mechanical properties</b>				<b>dam / cond.*</b>
Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	4800 / -
Stress at break	5 mm/min	ISO 527-1/-2	MPa	90 / -
Strain at break	5 mm/min	ISO 527-1/-2	%	8 / -
Izod impact strength, +23°C	+23°C	ISO 180/1U	kJ/m <sup>2</sup>	45 / -
Izod notched impact strength, +23°C	+23°C	ISO 180/1A	kJ/m <sup>2</sup>	6.5 / -

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

	Condition	Standard	Unit	Value
<b>Thermal properties</b>				
Melting temperature, 10°C/min		ISO 11357-1	°C	221
Temp. of deflection under load, 1.80 MPa	1.80 MPa	ISO 75	°C	180
Vicat softening temperature	50°C/h - 50N	ISO 306	°C	205

	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)
Recommended melt temperature	240 - 270 °C
Recommended mould temperature	70 - 120 °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 unfilled polyamides, Domo recommends the use of high alloy steel with a low chromium content. For example: X38CrMoV5-1 (EN Norm) - 1.2367 / 1.2343 (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.