

TECHNICAL DATA SHEET

**TECHNYL 4EARTH C1E 216L2 BK H**  
**ECONAMID ORO 6UV3 114 BK**



Recycled polyamide 6, UV-stabilized, for injection molding, black

**General**

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

**Product identification**

ISO 1043 abbreviation	PA6(REC)
ISO 16396 designation	PA6,(R100),ML1,S14-030

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

**Physical properties**

Property	Condition	Standard	Unit	Value
Density		ISO 1183	g/cm <sup>3</sup>	1.13
Humidity absorption	T=23°C, 50% RH	ISO 62	%	3.3 - 3.4
Water absorption	24 hr, 23°C	ISO 62	%	1.9 - 2.0
Water absorption, saturation			%	9.1
Molding shrinkage, parallel		ISO 294-4, 2577	%	1.4 - 1.6
Molding shrinkage, normal		ISO 294-4, 2577	%	1.35 - 1.55
Melt volume-flow rate, MVR, 5.0 kg	275°C, 5kg	ISO 1133	cm <sup>3</sup> /10 min	120.0

	Condition	Standard	Unit	Value
<b>Mechanical properties</b>				<b>dam / cond.*</b>
Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	3200 / -
Stress at break		ISO 527-1/-2	MPa	85 / -
Strain at break		ISO 527-1/-2	%	3.5 / -
Flexural modulus, ISO 178	2 mm/min	ISO 178	MPa	2800 / -
Flexural strength, ISO 178	2 mm/min	ISO 178	MPa	120 / -
Charpy impact strength, +23°C	+23°C	ISO 179/1eU	kJ/m <sup>2</sup>	NB
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	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	220

	Condition	Standard	Unit	Value
<b>Burning behaviour</b>				
Burning rate, FMVSS, Thickness 1 mm		FMVSS 302		< 100 mm/min

### 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.