

TECHNICAL DATA SHEET

**TECHNYL 4EARTH C5E 236L1 V15 GY 7439**  
**DOMAMID R 6G15UV1 500 GY77439**



Recycled polyamide 6, 15% glass fiber reinforced, UV-stabilized, improved impact resistance, for injection moulding

**General**

Certifications	RoHS		
Polymer type	PA6		
Feature	impact modified UV stabilized not heat stabilized	improved impact resistance(obs) recycled	
Processing technology	injection moulding		

**Product identification**

ISO 1043 abbreviation	PA6-I(REC)-GF15
ISO 16396 designation	PA6-I,GF15(R50),ML1,S14-050

Condition	Standard	Unit	Value
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**Physical properties**

Condition	Standard	Unit	Value
Density	ISO 1183	g/cm <sup>3</sup>	1.23
Humidity absorption	T=23°C, 50% RH	%	2.4 - 2.8
Water absorption	24 hr, 23°C	%	1.5 - 1.6
Water absorption, saturation		%	7.5
Molding shrinkage, parallel	ISO 294-4, 2577	%	0.4 - 0.6
Molding shrinkage, normal	ISO 294-4, 2577	%	0.8 - 1.0
Viscosity number	96% H2SO4	cm <sup>3</sup> /g	140.0

	Condition	Standard	Unit	Value
<b>Mechanical properties</b>				<b>dam / cond.*</b>
Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	5000 / -
Stress at break	5 mm/min	ISO 527-1/-2	MPa	95 / -
Strain at break	5 mm/min	ISO 527-1/-2	%	3 / -
Flexural modulus, ISO 178	2 mm/min	ISO 178	MPa	4000 / -
Flexural strength, ISO 178	2 mm/min	ISO 178	MPa	125 / -
Charpy impact strength, +23°C	+23°C	ISO 179/1eU	kJ/m <sup>2</sup>	50 / -
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m <sup>2</sup>	7 / -
Izod impact strength, +23°C	+23°C	ISO 180/1U	kJ/m <sup>2</sup>	40 / -
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
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

**Processing conditions**

### Processing conditions

Drying temperature/time	75-85°C / 2-4h (with dew point of dried air < -30 °C)
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 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.