

TECHNICAL DATA SHEET

TECHNYL 4EARTH C5E 216M WT R9016 H
ECONAMID FL 6 500 WTR9016


Recycled polyamide 66/6, 10% carbon fiber reinforced, heat-aging stabilized, improved tribological properties, for injection molding, natural color

General

Certifications	RoHS	
Polymer type	PA6	
Feature	impact modified not heat stabilized	recycled
Processing technology	injection moulding	

Product identification

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

Condition	Standard	Unit	Value
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Physical properties

Density		ISO 1183	g/cm ³	1.12
Viscosity number	96% H2SO4	ISO 307	cm ³ /g	135.0

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	Condition	Standard	Unit	Value
Mechanical properties				dam / cond.*
Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	2900 / -
Strain at break	50 mm/min	ISO 527-1/-2	%	47 / -
Yield stress	50 mm/min	ISO 527-1/-2	MPa	70 / -
Flexural modulus, ISO 178	2 mm/min	ISO 178	MPa	2200 / -
Flexural strength, ISO 178	2 mm/min	ISO 178	MPa	85 / -
Charpy impact strength, +23°C	+23°C	ISO 179/1eU	kJ/m ²	NB
Charpy impact strength, -30°C	-30°C	ISO 179/1eU	kJ/m ²	NB
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	NB
Izod notched impact strength, +23°C	+23°C	ISO 180/1A	kJ/m ²	10 / -
Rockwell hardness		ISO 2039/2	ScaleR	115 / -

*: **conditioned according to ISO 1110**

	Condition	Standard	Unit	Value
Thermal properties				
Melting temperature, 10°C/min		ISO 11357-1	°C	221
Temp. of deflection under load, 0.45 MPa	0.45 MPa	ISO 75	°C	160
Temp. of deflection under load, 1.80 MPa	1.80 MPa	ISO 75	°C	55
Vicat softening temperature	50°C/h - 50N	ISO 306	°C	190

	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
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Electrical properties

Volume resistivity		IEC 62631-3-1	ohm.m	1.0E13
Surface resistivity		IEC 62631-3-1	ohm	1.0E13

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	60 - 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.