

TECHNICAL DATA SHEET

TECHNYL 4EARTH AC9E 218 C10 NC H

Polyamide 66/6, 10% carbon fiber reinforced, heat-aging stabilized, for injection moulding, natural color

General

Certifications	RoHS	EC 1907/2006 (REACH)
Polymer type	PA66/6 copolymer	
Feature	heat-aging stabilized	recycled
Colors available	natural	
Forms	pellets	
Processing technology	injection moulding	

Product identification

ISO 1043 abbreviation	PA66/6(REC)-CF10
ISO 16396 designation	PA66/6,CF10(R75),M1H,S14-090

Condition	Standard	Unit	Value
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Physical properties

Density		ISO 1183	g/cm ³	1.17
Molding shrinkage, parallel		ISO 294-4, 2577	%	0.2 - 0.5
Molding shrinkage, normal		ISO 294-4, 2577	%	0.7 - 1.0

	Condition	Standard	Unit	Value
Mechanical properties				dam / cond.*
Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	9700 / -
Stress at break	5 mm/min	ISO 527-1/-2	MPa	140 / -
Strain at break	5 mm/min	ISO 527-1/-2	%	2.5 / -
Flexural modulus, ISO 178	2 mm/min	ISO 178	MPa	7800 / -
Charpy impact strength, +23°C	+23°C	ISO 179/1eU	kJ/m ²	38 / -
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m ²	4.5 / -

*: **conditioned according to ISO 1110**

	Condition	Standard	Unit	Value
Thermal properties				
Melting temperature, 10°C/min		ISO 11357-1	°C	262
Temp. of deflection under load, 0.45 MPa	0.45 MPa	ISO 75	°C	245
Temp. of deflection under load, 1.80 MPa	1.80 MPa	ISO 75	°C	225
Vicat softening temperature	50°C/h - 50N	ISO 306	°C	230

	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
Electrical properties				
Volume resistivity		IEC 62631-3-1	ohm.m	1000.0
Surface resistivity		IEC 62631-3-1	ohm	10000.0

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

Processing conditions

Recommended melt temperature	270 - 300 °C
Recommended mould temperature	80 - 110 °C

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.