

TECHNICAL DATA SHEET

TECHNYL 4EARTH A2E 216L1 V30 GY 7499 H
XAE 1938 GY 7499


TECHNYL 4EARTH A2E 216L1 V30 GY 7499 H is a Polyamide 66, 30% glass fiber reinforced, UV-stabilized, for injection moulding.

General

Certifications	RoHS	EC 1907/2006 (REACH)
Polymer type	PA66	
Feature	UV stabilized	recycled
Applications	electrical/electronic applications	
Colors available	grey	
Forms	pellets	
Processing technology	injection moulding	

Product identification

ISO 1043 abbreviation	PA66(REC)-GF30
ISO 16396 designation	PA66,GF30(R100),M,S14-090

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

Physical properties

Density		ISO 1183	g/cm ³	1.38
Humidity absorption	T=23°C, 50% RH	ISO 62	%	2.0 - 2.2
Water absorption	24 hr, 23°C	ISO 62	%	1.4 - 1.5
Water absorption, saturation			%	6.1

TECHNICAL DATA SHEET

TECHNYL 4EARTH A2E 216L1 V30 GY 7499 H

	Condition	Standard	Unit	Value
Mechanical properties				dam / cond.*
Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	9000 / -
Stress at break		ISO 527-1/-2	MPa	130 / -
Strain at break		ISO 527-1/-2	%	2 / -
Flexural modulus, ISO 178	2 mm/min	ISO 178	MPa	8000 / -
Flexural strength, ISO 178	2 mm/min	ISO 178	MPa	180 / -
Charpy impact strength, +23°C	+23°C	ISO 179/1eU	kJ/m ²	35 / -
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m ²	5 / -

*: **conditioned according to ISO 1110**

	Condition	Standard	Unit	Value
Thermal properties				
Melting temperature, 10°C/min		ISO 11357-1	°C	262

	Condition	Standard	Unit	Value
Burning behaviour				
Glow-wire flammability index, GWFI, 1.5 mm	1.5 mm	IEC 60695-2-12	°C	>= 650
Burning rate, FMVSS, Thickness 1 mm		FMVSS 302		< 100 mm/min

Processing conditions	
Drying temperature/time	80
Suggested max moisture	0.2 %
Rear temperature	270 - 280 °C
Middle temperature	275 - 285 °C
Front temperature	280 - 290 °C
Recommended melt temperature	270 - 290 °C
Recommended mould temperature	70 - 100 °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 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. 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.