# **TECHNYL® 4EARTH®**Sustainable polyamide



**TECHNICAL DATA SHEET** 

### **TECHNYL 4EARTH A2E 216L1 V30 GY 7499 H**

(Previously 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**

Feature	UV-stabilized	
Polymer type	PA66 (Polyamide 66)	
Processing technology	Injection molding	
Certification	RoHS	EC 1907/2006 (REACH)
Applications	Electrical/Electronic Applications	
Colors available	Grey	
Forms	Pellets	

### **Product identification**

ISO 1043 abbreviation	PA66-GF30
ISO 16396 designation	PA66,GF30(R100),M1,S14-090

Physical properties				
Density		ISO 1183	g/cm³	1.38
Humidity absorption	T=23°C, 50% RH	ISO 62	%	2.2 - 2.4
Water absorption	24 hr, 23°C	ISO 62	%	0.7 - 0.8
Water absorption, saturation			%	5.3

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/m²	35 / -
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m²	5/-

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	Condition			
Thermal properties				
Melting temperature, 10°C/min		ISO 11357-1	°C	262
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
*· conditioned according to ISO 1110	1			

<sup>\*:</sup> conditioned according to ISO 1110

### **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 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.

#### **Disclaimer**

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