

TECHNICAL DATA SHEET

**TECHNYL 4EARTH A1E 318 V40 BK H**  
**TECHNYL AR 318 V40 BLACK**



**General**

Certifications	RoHS	EC 1907/2006 (REACH)
Polymer type	PA66	
Feature	heat-aging stabilized recycled	medium viscosity
Applications	automotive applications industrial applications	consumer applications
Colors available	black	
Forms	pellets	
Processing technology	extrusion	

**Product identification**

ISO 1043 abbreviation	PA66(REC)-GF40
ISO 16396 designation	PA66,GF40(R100),EH,S14-120

Condition	Standard	Unit	Value
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**Physical properties**

Condition	Standard	Unit	Value
Density	ISO 1183	g/cm <sup>3</sup>	1.45
Humidity absorption	T=23°C, 50% RH	%	1.9
Water absorption	24 hr, 23°C	%	0.5 - 0.6
Water absorption, saturation		%	4.1
Molding shrinkage, parallel	ISO 294-4, 2577	%	0.3 - 0.4
Molding shrinkage, normal	ISO 294-4, 2577	%	0.75 - 0.85

	Condition	Standard	Unit	Value
<b>Mechanical properties</b>				<b>dam / cond.*</b>
Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	13000 / -
Stress at break		ISO 527-1/-2	MPa	210 / -
Strain at break		ISO 527-1/-2	%	2.6 / -
Flexural modulus, ISO 178	2 mm/min	ISO 178	MPa	12000 / -
Flexural strength, ISO 178	2 mm/min	ISO 178	MPa	315 / -
Charpy impact strength, +23°C	+23°C	ISO 179/1eU	kJ/m <sup>2</sup>	70 / -
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m <sup>2</sup>	13 / -
Izod impact strength, +23°C	+23°C	ISO 180/1U	kJ/m <sup>2</sup>	60 / -

\*: **conditioned according to ISO 1110**

	Condition	Standard	Unit	Value
<b>Thermal properties</b>				
Melting temperature, 10°C/min		ISO 11357-1	°C	259
Temp. of deflection under load, 1.80 MPa	1.80 MPa	ISO 75	°C	248

	Condition	Standard	Unit	Value
<b>Burning behaviour</b>				
Burning rate, FMVSS, Thickness 1 mm		FMVSS 302		< 100 mm/min

### 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.,The processing parameters like processing temperatures are a recommendation and can be adjusted in function of injection machine size, part geometry / design.