

TECHNICAL DATA SHEET

TECHNYL C 236 V15 BK

DOMAMID 6G15I1 301 BK

Polyamide 6, 15% glass fiber reinforced, impact modified, for injection moulding, black

General

Certifications	RoHS	EC 1907/2006 (REACH)
Polymer type	PA6	
Feature	impact modified	
Colors available	black	
Forms	pellets	
Processing technology	injection moulding	

Product identification

ISO 1043 abbreviation	PA6-I-GF15
ISO 16396 designation	PA6-I,GF15,MPS,S12-050

Condition	Standard	Unit	Value
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Physical properties

Condition	Standard	Unit	Value	
Density	ISO 1183	g/cm ³	1.22	
Humidity absorption	T=23°C, 50% RH	ISO 62	%	2.5 - 2.7
Water absorption	24 hr, 23°C	ISO 62	%	1.5 - 1.6
Water absorption, saturation			%	7.5
Molding shrinkage, parallel	ISO 294-4, 2577	%		0.5 - 0.7
Molding shrinkage, normal	ISO 294-4, 2577	%		0.9 - 1.1

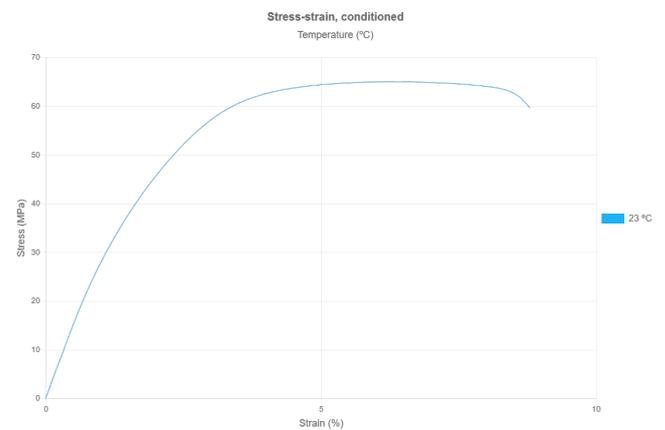
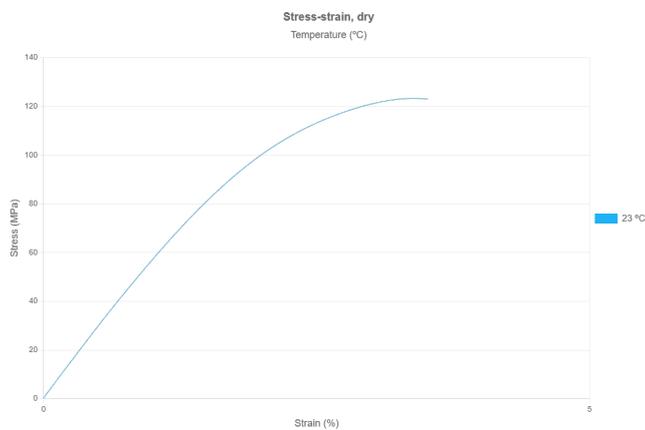
	Condition	Standard	Unit	Value
Mechanical properties				dam / cond.*
Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	5500 / 3000
Stress at break	5 mm/min	ISO 527-1/-2	MPa	120 / 65
Strain at break	5 mm/min	ISO 527-1/-2	%	3.6 / 14
Flexural modulus, ISO 178	2 mm/min	ISO 178	MPa	5000 / 2800
Flexural strength, ISO 178	2 mm/min	ISO 178	MPa	195 / 100
Charpy impact strength, +23°C	+23°C	ISO 179/1eU	kJ/m ²	55 / 75
Charpy impact strength, -30°C	-30°C	ISO 179/1eU	kJ/m ²	45 / -
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m ²	6 / 15
Charpy notched impact strength, -30°C	-30°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	221
Temp. of deflection under load, 0.45 MPa	0.45 MPa	ISO 75	°C	215
Temp. of deflection under load, 1.80 MPa	1.80 MPa	ISO 75	°C	200
Vicat softening temperature	50°C/h - 50N	ISO 306	°C	205

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

Processing conditions	
Drying temperature/time	75-85°C / 2-4h (with dew point of dried air < -30 °C)
Recommended melt temperature	250 - 290 °C
Recommended mould temperature	80 - 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. The processing parameters like processing temperatures are a recommendation and can be adjusted in function of injection machine size, part geometry / design.