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TECHNICAL DATA SHEET

TECHNYL C 236 V15 BK

(Previously DOMAMID 6G15I1 301 BK)

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

General

Feature	Impact modified	
Polymer type	PA6 (Polyamide 6)	
Processing technology	Injection molding	
Certification	RoHS	EC 1907/2006 (REACH)
Colors available	Black	
Forms	Pellets	

Product identification

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

	Condition	Standard	Unit	Value
Physical properties				
Density		ISO 1183	g/cm³	1.22
Humidity absorption	T=23°C, 50% RH	ISO 62	%	2.5 - 2.7
Water absorption	24 hr, 23°C	ISO 62	%	1.7 - 1.8
Molding shrinkage, parallel		ISO 294-4, 2577	%	0.2 - 0.4
Molding shrinkage, normal		ISO 294-4, 2577	%	0.9 - 1.1
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/m²	60 / 75
Charpy impact strength, -30°C	-30°C	ISO 179/1eU	kJ/m²	45 / -
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m²	7 / 15
Charpy notched impact strength, -30°C	-30°C	ISO 179/1eA	kJ/m²	5 / -

	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

Burning behaviour

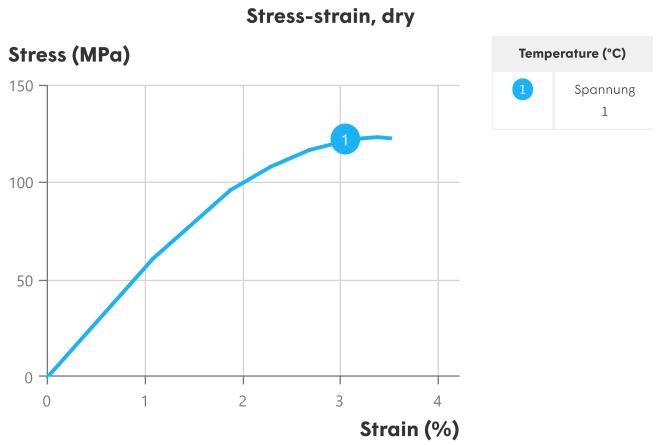
Burning rate, FMVSS, Thickness 1 mm		FMVSS 302		< 100 mm/min

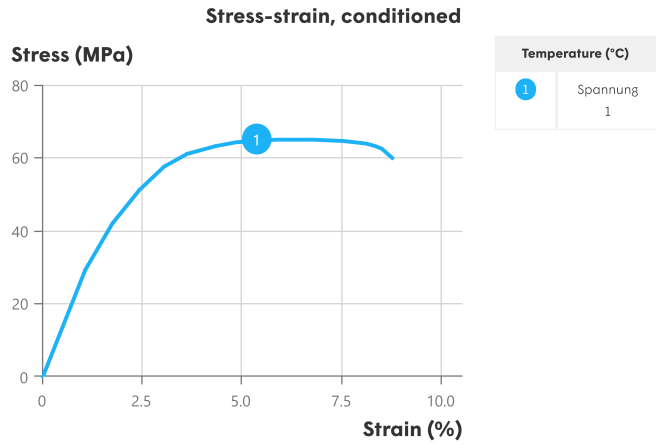
Test run at 23°C if not differently specified, DAM state (dry as moulded).
**: conditioned according to ISO 1110*

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

These parameters are typical of the product but should be related to the type of machinery used and to the type of moulded part.





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.

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