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TECHNICAL DATA SHEET

TECHNYL C 246SI V40 BK

(Previously DOMAMID 6G40IK1 BK)

Polyamide 6, 40% glass fiber reinforced, low temperature impact modified, for injection moulding, black

General

Feature	Low temperature impact modified
Polymer type	PA6 (Polyamide 6)
Processing technology	Injection molding
Certification	RoHS

Product identification

ISO 1043 abbreviation	PA6-I-GF40
ISO 16396 designation	PA6-I,GF40,M1,S14-120

	Condition	Standard	Unit	Value
Physical properties				
Density		ISO 1183	g/cm³	1.43
Humidity absorption	T=23°C, 50% RH	ISO 62	%	1.4 - 1.8
Molding shrinkage, parallel		ISO 294-4, 2577	%	0.4 - 0.6
Molding shrinkage, normal		ISO 294-4, 2577	%	0.9 - 1.1
Viscosity number	96% H2SO4	ISO 307	cm³/g	145
Mechanical properties				**dam / cond.***
Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	12000 / 7000
Stress at break	5 mm/min	ISO 527-1/-2	MPa	170 / 120
Strain at break	5 mm/min	ISO 527-1/-2	%	4.5 / 9
Flexural modulus, ISO 178	2 mm/min	ISO 178	MPa	10000 / 6500
Charpy impact strength, +23°C	+23°C	ISO 179/1eU	kJ/m²	105 / 120
Charpy impact strength, -30°C	-30°C	ISO 179/1eU	kJ/m²	105 / 100
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m²	23 / 32
Charpy notched impact strength, -30°C	-30°C	ISO 179/1eA	kJ/m²	17 / 17

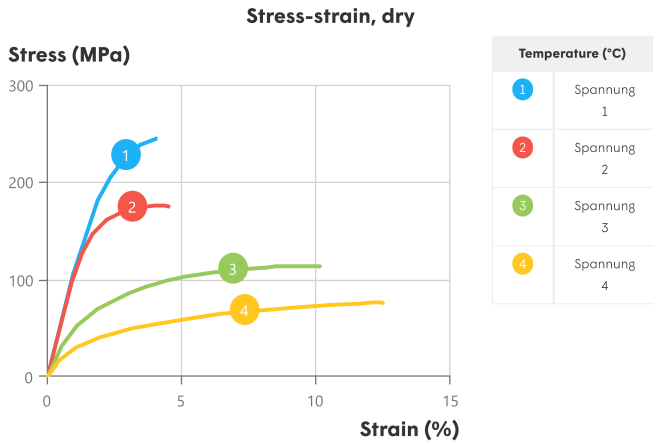
	Condition	Standard	Unit	Value
Thermal properties				
Melting temperature, 10°C/min		ISO 11357-1	°C	221
Temp. of deflection under load, 0.45 MPa	0.45 MPa	ISO 75	°C	216
Temp. of deflection under load, 1.80 MPa	1.80 MPa	ISO 75	°C	200
Burning behaviour				
Burning rate, FMVSS, Thickness 1 mm		FMVSS 302		< 100 mm/min

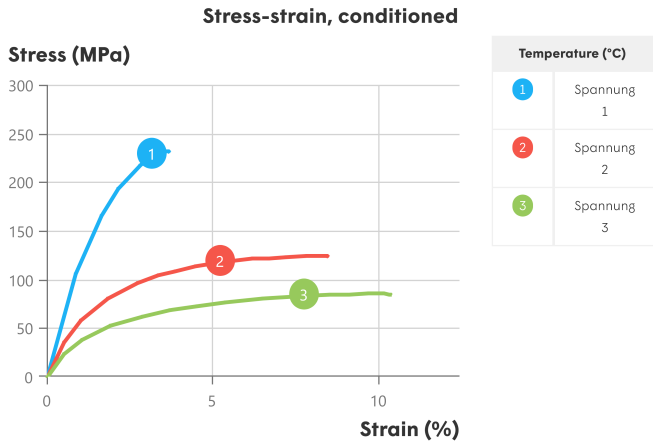
Test run at 23°C if not differently specified, DAM state (dry as moulded).
**: conditioned according to ISO 1110*

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.





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