

TECHNICAL DATA SHEET

TECHNYL C 248SI V40 BK 31N

(Previously DOMAMID 6G40IK1H2 BK99)

Polyamide 6, 40% glass fiber reinforced, heat-aging stabilized, improved surface finish, low temperature impact modified, for injection molding, black

General

Feature	Heat-aging stabilized Low temperature impact modified	Improved surface finish
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,M1H,S14-110

	Condition	Standard	Unit	Value
Physical properties				
Density		ISO 1183	g/cm ³	1.42
Humidity absorption	T=23°C, 50% RH	ISO 62	%	1.5 - 2
Molding shrinkage, parallel		ISO 294-4, 2577	%	0.05 - 0.25
Molding shrinkage, normal		ISO 294-4, 2577	%	0.45 - 0.65

Mechanical properties

				dam / cond.*
Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	11000 / 6500
Stress at break	5 mm/min	ISO 527-1/-2	MPa	175 / 120
Strain at break	5 mm/min	ISO 527-1/-2	%	4.5 / 9.5
Flexural modulus, ISO 178	2 mm/min	ISO 178	MPa	9500 / 6000
Flexural strength, ISO 178	2 mm/min	ISO 178	MPa	295 / 170
Charpy impact strength, +23°C	+23°C	ISO 179/1eU	kJ/m ²	105 / 115
Charpy impact strength, -30°C	-30°C	ISO 179/1eU	kJ/m ²	110 / 115
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m ²	28 / 35
Charpy notched impact strength, -30°C	-30°C	ISO 179/1eA	kJ/m ²	18 / 18

	Condition	Standard	Unit	Value
Thermal properties				
Melting temperature, 10°C/min		ISO 11357-1	°C	221

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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