

## 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
<b>Physical properties</b>				
Density		ISO 1183	g/cm <sup>3</sup>	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 <sup>2</sup>	105 / 115
Charpy impact strength, -30°C	-30°C	ISO 179/1eU	kJ/m <sup>2</sup>	110 / 115
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m <sup>2</sup>	28 / 35
Charpy notched impact strength, -30°C	-30°C	ISO 179/1eA	kJ/m <sup>2</sup>	18 / 18

	Condition	Standard	Unit	Value
<b>Thermal properties</b>				
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.*

### Disclaimer

The information provided in this documentation corresponds to our technical knowledge at the date of its publication and do not constitute a specification. This information may be subject to revision at our discretion. Domo cannot anticipate all conditions under which this information and our products of other manufactures in combination with our products may be used. Domo accepts no responsibility for results obtained by the application of this information or for the safety and suitability of our products alone or in combination with other products. Users are advised to make their own tests to determine the safety and suitability of each product or product combination for their own purposes. Unless otherwise agreed in writing, Domo sells the product without warranties. Buyers and users assume all responsibility and liability for loss or damage arising from handling and use of our products, whether used alone or in combination with other products. Unless specifically indicated, the grades mentioned are not suitable for applications in the pharmaceutical/medical sector.