

TECHNICAL DATA SHEET

TECHNYL C 259SI V15 BK 9281

(Previously DOMAMID 6G15IK3H1 BK99281)

Polyamide 6, 15% glass fiber reinforced, heat-aging stabilized, low temperature impact modified, for injection moulding

General

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

Product identification

ISO 1043 abbreviation	PA6-I-GF15
ISO 16396 designation	PA6-I,GF15,M1H,S14-040

Condition	Standard	Unit	Value
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Physical properties

Condition	Standard	Unit	Value	
Density	ISO 1183	g/cm ³	1.18	
Water absorption	24 hr, 23°C	ISO 62	%	2.4
Molding shrinkage, parallel	ISO 294-4, 2577	%	0.65 - 0.85	
Molding shrinkage, normal	ISO 294-4, 2577	%	0.75 - 0.95	

Mechanical properties

Condition	Standard	Unit	Value	
Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	4600 / 2300
Stress at break	5 mm/min	ISO 527-1/-2	MPa	85 / 50
Strain at break	5 mm/min	ISO 527-1/-2	%	4.5 / 20
Flexural modulus, ISO 178	2 mm/min	ISO 178	MPa	3600 / 2100
Charpy impact strength, +23°C	+23°C	ISO 179/1eU	kJ/m ²	70 / 95
Charpy impact strength, -30°C	-30°C	ISO 179/1eU	kJ/m ²	75 / 70
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m ²	18 / 30
Charpy notched impact strength, -30°C	-30°C	ISO 179/1eA	kJ/m ²	11 / 12

	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	205
Temp. of deflection under load, 1.80 MPa	1.80 MPa	ISO 75	°C	165
Vicat softening temperature	50°C/h - 50N	ISO 306	°C	190

Burning behaviour

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