

TECHNICAL DATA SHEET

TECHNYL A 236SI V12 BK R9004

(Previously DOMAMID 66G12IK1 BKR9004)

Polyamide 66, 12% glass fiber reinforced, low temperature impact modified, for injection moulding

General

Feature	UL HB	Low temperature impact modified
Polymer type	PA66 (Polyamide 66)	
Processing technology	Injection molding	
Certification	RoHS	UL-Yellow Card

Product identification

ISO 1043 abbreviation	PA66-I-GF12
ISO 16396 designation	PA66-I,GF12,M1,S14-040

Condition

Standard

Unit

Value

Physical properties

	Condition	Standard	Unit	Value
Density		ISO 1183	g/cm ³	1.17
Molding shrinkage, parallel		ISO 294-4, 2577	%	0.5 - 0.7
Molding shrinkage, normal		ISO 294-4, 2577	%	1 - 1.2
Viscosity number	96% H2SO4	ISO 307	cm ³ /g	145

Mechanical properties

dam / cond.*


	Condition	Standard	Unit	Value
Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	4100 / -
Stress at break	5 mm/min	ISO 527-1/-2	MPa	100 / -
Strain at break	5 mm/min	ISO 527-1/-2	%	4 / -
Flexural modulus, ISO 178	2 mm/min	ISO 178	MPa	3500 / -
Flexural strength, ISO 178	2 mm/min	ISO 178	MPa	135 / -
Charpy impact strength, +23°C	+23°C	ISO 179/1eU	kJ/m ²	65 / -
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m ²	11 / -
Izod impact strength, +23°C	+23°C	ISO 180/1U	kJ/m ²	55 / -
Izod notched impact strength, +23°C	+23°C	ISO 180/1A	kJ/m ²	11 / -

	Condition	Standard	Unit	Value
Thermal properties				
Melting temperature, 10°C/min		ISO 11357-1	°C	262
Temp. of deflection under load, 0.45 MPa	0.45 MPa	ISO 75	°C	245
Temp. of deflection under load, 1.80 MPa	1.80 MPa	ISO 75	°C	230
Vicat softening temperature	50°C/h - 50N	ISO 306	°C	245

Electrical properties

Volume resistivity		IEC 62631-3-1	ohm.m	1E+013
Surface resistivity		IEC 62631-3-1	ohm	1E+013

Burning behaviour

UL Yellow Card availability 	Click here to have access to the UL Yellow Card → E170540-469778			
Flammability, 0.75 mm	0.75 mm	UL 94		HB
Glow-wire flammability index, GWFI	1-3 mm	IEC 60695-2-12	°C	650
Glow-wire ignition temperature, GWIT	1-3 mm	IEC 60695-2-13	°C	675
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), valid for black products.
: 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	270 - 290 °C
Recommended mould temperature	90 - 110 °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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