

TECHNICAL DATA SHEET

TECHNYL A 236SI V12 RD R3000

(Previously DOMAMID 66G12IK1 RDR3000)

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	

Product identification

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

Condition	Standard	Unit	Value
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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	90 / -
Strain at break	5 mm/min ISO 527-1/-2	%	4 / -
Flexural modulus, ISO 178	2 mm/min ISO 178	MPa	3300 / -
Flexural strength, ISO 178	2 mm/min ISO 178	MPa	140 / -
Charpy impact strength, +23°C	+23°C ISO 179/1eU	kJ/m ²	60 / -
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

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 natural colored 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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