

TECHNICAL DATA SHEET

TECHNYL PROTECT A 32G1 BK
(Previously TECHNYL A 32G1 BLACK)

TECHNYL PROTECT A 32G1 BK is a polyamide 66 based on a brominated flame retardant system, unreinforced, heat stabilized, for injection molding.

General

Feature	Flame retarded	Heat-aging stabilized
Polymer type	PA66 (Polyamide 66)	
Processing technology	Injection molding	
Certification	RoHS EC 1907/2006 (REACH)	UL-Yellow Card
Applications	Connectors	Electrical/Electronic Applications
Colors available	Black	
Forms	Pellets	

Product identification

ISO 1043 abbreviation	PA66 FR(20)
ISO 16396 designation	PA66,FR(20),M1,S14-030

Condition	Standard	Unit	Value
-----------	----------	------	-------

Physical properties

	Condition	Standard	Unit	Value
Density		ISO 1183	g/cm ³	1.35
Humidity absorption	T=23°C, 50% RH	ISO 62	%	1.7
Water absorption	24 hr, 23°C	ISO 62	%	0.75
Molding shrinkage, parallel		ISO 294-4, 2577	%	1.5
Molding shrinkage, normal		ISO 294-4, 2577	%	1.6

TECHNICAL DATA SHEET

TECHNYL PROTECT A 32G1 BK

	Condition	Standard	Unit	Value
Mechanical properties				dam / cond.*
Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	2700 / -
Stress at break		ISO 527-1/-2	MPa	52 / -
Strain at break		ISO 527-1/-2	%	8 / -
Yield stress		ISO 527-1/-2	MPa	54 / -
Yield strain		ISO 527-1/-2	%	5 / -
Flexural modulus, ISO 178	2 mm/min	ISO 178	MPa	2900 / -
Flexural strength, ISO 178	2 mm/min	ISO 178	MPa	100 / -
Charpy impact strength, +23°C	+23°C	ISO 179/1eU	kJ/m ²	55 / -
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m ²	4 / -


Thermal properties

Melting temperature, 10°C/min		ISO 11357-1	°C	257
Temp. of deflection under load, 0.45 MPa	0.45 MPa	ISO 75	°C	204
Temp. of deflection under load, 1.80 MPa	1.80 MPa	ISO 75	°C	73

Electrical properties

Comparative tracking index	Solution A	IEC 60112	V	400
CTI performance level category		Sol A		PLC 1
Dielectric strength	1 mm	IEC 60243-1	kV/mm	39

Burning behaviour

UL Yellow Card availability 	Click here to have access to the UL Yellow Card → QMFZ2.E44716			
Flammability, 0.75 mm	0.75 mm	UL 94		V2
Flammability, 1.5 mm	1.5 mm	UL 94		V2
Flammability, 3.0 mm	3.0 mm	UL 94		V2
Glow-wire flammability index, GWFI, 0.75 mm	0.75 mm	IEC 60695-2-12	°C	900
Glow-wire flammability index, GWFI, 1.5 mm	1.5 mm	IEC 60695-2-12	°C	900
Glow-wire ignition temperature, GWIT, 0.75 mm	0.75 mm	IEC 60695-2-13	°C	875
Glow-wire ignition temperature, GWIT, 1.5 mm	1.5 mm	IEC 60695-2-13	°C	900

*: conditioned according to ISO 1110

Processing conditions

Drying temperature/time	80
Suggested max moisture	0.12 %
Rear temperature	270 °C
Middle temperature	260 - 280 °C
Front temperature	270 - 290 °C
Recommended mould temperature	60 - 80 °C

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.