

TECHNICAL DATA SHEET

TECHNYL PROTECT A 62M1 V25 BK

TECHNYL A 62M1 V25 BLACK

TECHNYL PROTECT A 62M1 V25 BK is a polyamide 66 based on a non-halogenated retardant system, reinforced with 25% of glass filled/fiber, for injection moulding. This grade uses a combination of additives to achieve low end part warpage while maintaining good mechanical properties with flame retardancy and electrical performance.

General

Polymer type	PA66
Processing technology	injection moulding

Product identification

ISO 1043 abbreviation	PA66-(GF+GM)25 FR(40)
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Condition	Standard	Unit	Value
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Physical properties

	Condition	Standard	Unit	Value
Density		ISO 1183	g/cm ³	1.38
Humidity absorption	T=23°C, 50% RH	ISO 62	%	0.85
Molding shrinkage, parallel		ISO 294-4, 2577	%	0.85
Molding shrinkage, normal		ISO 294-4, 2577	%	0.6

	Condition	Standard	Unit	Value
Mechanical properties				dam / cond.*
Tensile modulus	1mm/min	ISO 527-1/-2	MPa	7200 / -
Stress at break	5mm/min	ISO 527-1/-2	MPa	105 / 85
Strain at break		ISO 527-1/-2	%	2.7 / -
Charpy impact strength, +23°C	+23°C	ISO 179/1eU	kJ/m ²	44 / 56
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m ²	6 / 8
Charpy notched impact strength, -30°C	-30°C	ISO 179/1eA	kJ/m ²	5 / -
Izod notched impact strength, +23°C	+23°C	ISO 180/1A	kJ/m ²	8 / 9

*: **conditioned according to ISO 1110**

	Condition	Standard	Unit	Value
Thermal properties				
Melting temperature, 10°C/min		ISO 11357-1	°C	263
Temp. of deflection under load, 0.45 MPa	0.45 MPa	ISO 75	°C	260
Temp. of deflection under load, 1.80 MPa	1.80 MPa	ISO 75	°C	232

	Condition	Standard	Unit	Value
Burning behaviour				
Flammability, 0.75 mm	0.75 mm	UL 94		V0
Flammability, 1.5 mm	1.5 mm	UL 94		V0
Flammability, 3.0 mm	3.0 mm	UL 94		V0
Glow-wire flammability index, GWFI, 0.75 mm	0.75 mm	IEC 60695-2-12	°C	960
Glow-wire flammability index, GWFI, 1.5 mm	1.5 mm	IEC 60695-2-12	°C	960
Glow-wire flammability index, GWFI, 3.0 mm			°C	960
Oxygen index			%	33.0

Processing conditions

Drying temperature/time	80
Suggested max moisture	0.2 %
Rear temperature	265 - 275 °C
Middle temperature	265 - 275 °C
Front temperature	270 - 280 °C
Recommended mould temperature	60 - 90 °C