

TECHNICAL DATA SHEET

**TECHNYL PROTECT A 30H1 V25 A BK**  
**DOMAMID FR 66G25V0AH1**



Polyamide 66, 25% glass fiber reinforced, heat-aging stabilized, halogenated flame retardant, for injection moulding

**General**

Certifications	RoHS EC 1907/2006 (REACH)	UL listed product
Polymer type	PA66	
Feature	heat-aging stabilized halogen free flame retardant	UL 94 V0
Processing technology	injection moulding	

**Product identification**

ISO 1043 abbreviation	PA66-GF25 FR(17)
ISO 16396 designation	PA66,GF25FR(17),MH,S14-090

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

**Physical properties**

	Condition	Standard	Unit	Value
Density		ISO 1183	g/cm <sup>3</sup>	1.56
Humidity absorption	T=23°C, 50% RH	ISO 62	%	2.2 - 2.4
Water absorption	24 hr, 23°C	ISO 62	%	0.8 - 0.9
Molding shrinkage, parallel		ISO 294-4, 2577	%	0.2 - 0.4
Molding shrinkage, normal		ISO 294-4, 2577	%	0.7 - 0.9

	Condition	Standard	Unit	Value
<b>Mechanical properties</b>				<b>dam / cond.*</b>
Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	9500 / -
Stress at break	5 mm/min	ISO 527-1/-2	MPa	130 / -
Strain at break	5 mm/min	ISO 527-1/-2	%	2.2 / -
Flexural modulus, ISO 178	2 mm/min	ISO 178	MPa	8800 / -
Flexural strength, ISO 178	2 mm/min	ISO 178	MPa	205 / -
Charpy impact strength, +23°C	+23°C	ISO 179/1eU	kJ/m <sup>2</sup>	45 / -
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m <sup>2</sup>	8.5 / -
Izod impact strength, +23°C	+23°C	ISO 180/1U	kJ/m <sup>2</sup>	40 / -
Izod notched impact strength, +23°C	+23°C	ISO 180/1A	kJ/m <sup>2</sup>	8 / -

\*: **conditioned according to ISO 1110**

	Condition	Standard	Unit	Value
<b>Thermal properties</b>				
Melting temperature, 10°C/min		ISO 11357-1	°C	262
Temp. of deflection under load, 0.45 MPa	0.45 MPa	ISO 75	°C	250
Temp. of deflection under load, 1.80 MPa	1.80 MPa	ISO 75	°C	240
Vicat softening temperature	50°C/h - 50N	ISO 306	°C	240

	Condition	Standard	Unit	Value
<b>Burning behaviour</b>				
UL Yellow Card availability 1	<b><u><a href="#">Click here to have access to the UL Yellow Card availability 1 -&gt; E170540-225458</a></u></b>			
Flammability, 0.75 mm	0.75 mm	UL 94		V0
Glow-wire flammability index, GWFI	1-3 mm	IEC 60695-2-12	°C	960
Glow-wire ignition temperature, GWIT	1-3 mm	IEC 60695-2-13	°C	850
Burning rate, FMVSS, Thickness 1 mm		FMVSS 302		< 100 mm/min

	Condition	Standard	Unit	Value
<b>Electrical properties</b>				
Volume resistivity		IEC 62631-3-1	ohm.m	1.0E16
Surface resistivity		IEC 62631-3-1	ohm	1.0E14
Comparative tracking index	Solution A	IEC 60112	V	350.0
CTI performance level category		Sol A		PLC 2

**Processing conditions**

Drying temperature/time	75-85°C / 2-4h (with dew point of dried air < -30 °C)
Suggested max moisture	0.1 %
Recommended melt temperature	270 - 290 °C
Recommended mould temperature	80 - 100 °C

**Injection notes**

The material is supplied in airtight bags, ready for use.,In case that the virgin material has absorbed moisture, it must be dried with a dehumidified air drying equipment, dew point minimum -20°C.,Recommended time 2-4h.