

TECHNICAL DATA SHEET

**TECHNYL PROTECT AT 20 V25 P BK**  
**DOMAMID FR 66G25V0P1A BK**



Polyamide 66/PET, 25% glass fiber reinforced, heat-aging stabilized, red phosphorous flame retardant, for injection moulding

**General**

Certifications	RoHS	UL listed product
Polymer type	PA66 + PET blend	
Feature	heat-aging stabilized UL 94 V0	red phosphorous flame retardant
Processing technology	injection moulding	

**Product identification**

ISO 1043 abbreviation	PA66+PET-GF25 FR(52)
ISO 16396 designation	PA66+PET,GF25FR(52),,S14-080

Condition	Standard	Unit	Value
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**Physical properties**

Density		ISO 1183	g/cm <sup>3</sup>	1.36
Molding shrinkage, parallel		ISO 294-4, 2577	%	0.4 - 0.6
Molding shrinkage, normal		ISO 294-4, 2577	%	0.9 - 1.1
Melt volume-flow rate, MVR, 5.0 kg	275°C, 5kg	ISO 1133	cm <sup>3</sup> /10 min	28.0
Viscosity number	96% H2SO4	ISO 307	cm <sup>3</sup> /g	145.0

	Condition	Standard	Unit	Value
<b>Mechanical properties</b>				<b>dam / cond.*</b>
Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	8500 / 6200
Stress at break	5 mm/min	ISO 527-1/-2	MPa	150 / 110
Strain at break	5 mm/min	ISO 527-1/-2	%	3.5 / 5
Flexural modulus, ISO 178	2 mm/min	ISO 178	MPa	7500 / 5600
Flexural strength, ISO 178	2 mm/min	ISO 178	MPa	210 / 160
Charpy impact strength, +23°C	+23°C	ISO 179/1eU	kJ/m <sup>2</sup>	70 / 75
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m <sup>2</sup>	10 / 15
Izod impact strength, +23°C	+23°C	ISO 180/1U	kJ/m <sup>2</sup>	55 / 65
Izod notched impact strength, +23°C	+23°C	ISO 180/1A	kJ/m <sup>2</sup>	9 / 14

\*: **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	230
Vicat softening temperature	50°C/h - 50N	ISO 306	°C	245

Condition	Standard	Unit	Value
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### Burning behaviour

UL Yellow Card availability 1	<b><u><a href="#">Click here to have access to the UL Yellow Card availability 1 -&gt; E170540-101492181</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	775
Oxygen index			%	27.0
Burning rate, FMVSS, Thickness 1 mm		FMVSS 302		< 100 mm/min

Condition	Standard	Unit	Value
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### Electrical properties

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	575.0
CTI performance level category		Sol A		PLC 1

### 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	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.