

TECHNICAL DATA SHEET

**TECHNYL PROTECT C 60 S30 GY R7001**  
**DOMAMID FR 6B30V0E 124**



Polyamide 6, 30% glass beads, halogen and red phosphorus free flame retardant, heat-aging stabilized, for injection moulding

**General**

Certifications	RoHS	EC 1907/2006 (REACH)
Polymer type	PA6	
Feature	halogen and red phosphorus free flame retardant UL 94 V0	heat-aging stabilized
Applications	electrical/electronic applications	
Colors available	grey	
Forms	pellets	
Processing technology	injection moulding	

**Product identification**

ISO 1043 abbreviation	PA6-GB30 FR(40)
ISO 16396 designation	PA6,GB30FR(40),MH,S14-050

Condition	Standard	Unit	Value
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**Physical properties**

Condition	Standard	Unit	Value
Density	ISO 1183	g/cm <sup>3</sup>	1.41
Molding shrinkage, parallel	ISO 294-4, 2577	%	0.8 - 1.0
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	100.0
Viscosity number	96% H2SO4 ISO 307	cm <sup>3</sup> /g	130.0

	Condition	Standard	Unit	Value
<b>Mechanical properties</b>				<b>dam / cond.*</b>
Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	5200 / -
Stress at break	5 mm/min	ISO 527-1/-2	MPa	50 / -
Strain at break	5 mm/min	ISO 527-1/-2	%	2 / -
Flexural modulus, ISO 178	2 mm/min	ISO 178	MPa	5000 / -
Flexural strength, ISO 178	2 mm/min	ISO 178	MPa	90 / -
Charpy impact strength, +23°C	+23°C	ISO 179/1eU	kJ/m <sup>2</sup>	15 / -
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m <sup>2</sup>	3 / -
Izod impact strength, +23°C	+23°C	ISO 180/1U	kJ/m <sup>2</sup>	15 / -
Izod notched impact strength, +23°C	+23°C	ISO 180/1A	kJ/m <sup>2</sup>	3 / -

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

	Condition	Standard	Unit	Value
<b>Thermal properties</b>				
Melting temperature, 10°C/min		ISO 11357-1	°C	221
Temp. of deflection under load, 0.45 MPa	0.45 MPa	ISO 75	°C	175
Temp. of deflection under load, 1.80 MPa	1.80 MPa	ISO 75	°C	75
Vicat softening temperature	50°C/h - 50N	ISO 306	°C	200

	Condition	Standard	Unit	Value
<b>Burning behaviour</b>				
Flammability, 1.5 mm	1.5 mm	UL 94		V0
Glow-wire flammability index, GWFI, 3.0 mm			°C	960
Glow-wire flammability index, GWFI	1-3 mm	IEC 60695-2-12	°C	>= 960
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	600.0
CTI performance level category		Sol A		PLC 0

### Processing conditions

Drying temperature/time	75-85°C / 2-4h (with dew point of dried air < -30 °C)
Suggested max moisture	0.2 %
Recommended melt temperature	230 - 260 °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.