

## TECHNICAL DATA SHEET

## DOMAMID 6G30UV1

Polyamide 6, 30% glass fiber reinforced, UV-stabilized, for injection moulding

## General

Polymer type	PA6 (Polyamide 6)
Processing technology	Injection molding
Certification	RoHS

## Product identification

ISO 1043 abbreviation	PA6-GF30
ISO 16396 designation	PA6,GF30,M1L1,S14-090

Condition

Standard

Unit

Value

## Physical properties

	Condition	Standard	Unit	Value
Density		ISO 1183	g/cm <sup>3</sup>	1.36
Molding shrinkage, parallel	72 hr, 23°C, 50% RH	ISO 294-4, 2577	%	0.3 - 0.5
Molding shrinkage, normal	72 hr, 23°C, 50% RH	ISO 294-4, 2577	%	0.8 - 1
Melt volume-flow rate, MVR, 5.0 kg	275°C, 5kg	ISO 1133	cm <sup>3</sup> /10 min	45
Viscosity number	96% H2SO4	ISO 307	cm <sup>3</sup> /g	145

## Mechanical properties

dam / cond.\*

	Condition	Standard	Unit	Value
Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	9500 / 6000
Stress at break	5 mm/min	ISO 527-1/-2	MPa	180 / 110
Strain at break	5 mm/min	ISO 527-1/-2	%	3.5 / 6
Flexural modulus, ISO 178	2 mm/min	ISO 178	MPa	8500 / 5000
Flexural strength, ISO 178	2 mm/min	ISO 178	MPa	270 / 160
Charpy impact strength, +23°C	+23°C	ISO 179/1eU	kJ/m <sup>2</sup>	90 / 105
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m <sup>2</sup>	15 / 25
Izod impact strength, +23°C	+23°C	ISO 180/1U	kJ/m <sup>2</sup>	80 / 90
Izod notched impact strength, +23°C	+23°C	ISO 180/1A	kJ/m <sup>2</sup>	15 / 25
Rockwell hardness		ISO 2039/2	ScaleR	122 / -

	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	220
Temp. of deflection under load, 1.80 MPa	1.80 MPa	ISO 75	°C	200
Vicat softening temperature	50°C/h - 50N	ISO 306	°C	215

### Electrical properties

Volume resistivity		IEC 62631-3-1	ohm.m	1E+013
Surface resistivity		IEC 62631-3-1	ohm	1E+013
Comparative tracking index	Solution A	IEC 60112	V	500

### Burning behaviour

Flammability, 0.75 mm	0.75 mm	UL 94		HB
Glow-wire flammability index, GWFI	1-3 mm	IEC 60695-2-12	°C	650
Burning rate, FMVSS, Thickness 1 mm		FMVSS 302		< 100 mm/min

*Test run at 23°C if not differently specified, DAM state (dry as moulded), valid for natural colored products.  
\*: conditioned according to ISO 1110*

### Processing conditions

Drying temperature/time	75-85°C / 2-4h (with dew point of dried air < -30 °C)
Recommended melt temperature	240 - 270 °C
Recommended mould temperature	90 - 100 °C

*These parameters are typical of the product but should be related to the type of machinery used and to the type of moulded part.*

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