

DOMAMID® 6G30ST1

Polyamide 6, 30% glass fiber reinforced, improved impact resistance, for injection moulding.

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TYPICAL PROPERTIES	CONDITION	STANDARD	UNIT	VALUE
PHYSICAL				
Density		ISO 1183	[g/cm ³]	1,32
Mold shrinkage parallel	72 hrs, 23°C, 50% RH	ISO 2577	[%]	0,4 ÷ 0,6
Mold shrinkage transverse	72 hrs, 23°C, 50% RH	ISO 2577	[%]	0,9 ÷ 1,1
RHEOLOGICAL				
Melt Volume Rate (MVR)	275 °C - 5,0 kg	ISO 1133	[cm ³ /10 min]	25
Viscosity number		ISO 307	[ml/g]	145
MECHANICAL				
				dam / cond.*
Tensile modulus	1 mm/min	ISO 527	[MPa]	8600 / 5500
Tensile stress at break	5 mm/min	ISO 527	[MPa]	140 / 100
Tensile strain at break	5 mm/min	ISO 527	[%]	4,5 / 7,0
Flexural modulus	2 mm/min	ISO 178	[MPa]	7700 / 4700
Flexural strength	2 mm/min	ISO 178	[MPa]	230 / 135
Charpy unnotched	+23 °C	ISO 179/1eU	[kJ/m ²]	100 / 120
Charpy notched	+23 °C	ISO 179/1eA	[kJ/m ²]	22 / 38
Izod impact unnotched	+23 °C	ISO 180/1A	[kJ/m ²]	90 / 110
Izod impact notched	+23 °C	ISO 180/1A	[kJ/m ²]	20 / 35
THERMAL				
Melting point	DSC	ISO 11357-1	[°C]	222
Heat Deflection Temperature (HDT-B)	0,45 MPa	ISO 75	[°C]	210
Heat Deflection Temperature (HDT-A)	1,80 MPa	ISO 75	[°C]	195
VICAT softening temperature	50°C/h - 50N	ISO 306	[°C]	205
ELECTRICAL				
Volume resistivity		IEC 93	[Ω·cm]	10 ¹⁵
Surface resistivity		IEC 93	[Ω]	10 ¹³
BURNING BEHAVIOUR				
Flammability	0,8 mm	UL 94	[Class]	HB
Burning rate (FMVSS)		FMVSS 302	[mm/min]	< 100

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	: 75-95°C / 2-4h
Recommended melt temperature	: 240-270 °C
Recommended mould temperature	: 90-120 °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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