

DOMAMID® 6G30 300 BK

(DOMAMID A1-003-V30-B)

Polyamide 6, injection moulding grade, 30 % glass fiber reinforced, black

24.03.2016

TYPICAL PROPERTIES	CONDITION	STANDARD	UNIT	VALUE
PHYSICAL				
Density		ISO 1183	[g/cm ³]	1,36
Moisture absorption	sat., 23°C, 50% RH	ISO 62	[%]	2,1
Mold shrinkage parallel	72 hrs, 23°C, 50% RH	ISO 2577	[%]	0,25 - 0,45
Mold shrinkage transverse	72 hrs, 23°C, 50% RH	ISO 2577	[%]	0,90 - 1,10
RHEOLOGICAL				
Melt Volume Rate (MVR)	275 °C - 5,0 kg	ISO 1133	[cm ³ /10 min]	45
Viscosity number	96% H2SO4	ISO 307	[ml/g]	145
MECHANICAL				
				dam / cond.*
Tensile modulus	1 mm/min	ISO 527	[MPa]	9300 / 6500
Tensile stress at break	5 mm/min	ISO 527	[MPa]	170 / 105
Tensile strain at break	5 mm/min	ISO 527	[%]	3,0 / 4,5
Flexural modulus	5 mm/min	ISO 178	[MPa]	7500 / 4400
Flexural strength	5 mm/min	ISO 178	[MPa]	260 / 155
Charpy unnotched	+23 °C	ISO 179/1eU	[kJ/m ²]	65 / 90
Charpy unnotched	-30 °C	ISO 179/1eU	[kJ/m ²]	60 /
Charpy notched	+23 °C	ISO 179/1eA	[kJ/m ²]	10 / 18
Charpy notched	-30 °C	ISO 179/1eA	[kJ/m ²]	8,5 /
THERMAL				
Melting point		ISO 11357-1	[°C]	221
Heat Deflection Temperature (HDT-B)	0,45 MPa	ISO 75	[°C]	220
Heat Deflection Temperature (HDT-A)	1,80 MPa	ISO 75	[°C]	210
VICAT softening temperature	50°C/h - 50N	ISO 306	[°C]	214
ELECTRICAL				
Volume resistivity		IEC 60093	[Ω·cm]	1E+15
Surface resistivity		IEC 60093	[Ω]	1E+14
BURNING BEHAVIOUR				
Burning rate (FMVSS)	2 mm	FMVSS 302	[mm/min]	< 100

Test run at 23°C if not differently specified, DAM state (dry as moulded).

*: 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 : 250-290 °C
 Recommended mould temperature : 80-100 °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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