DOMO® Engineering Plastics Technical Data Sheet



DOMAMID® FR 66/6V0M

(DOMAMID 66/6VOM)

Polyamide 66/6, flame retardant, halogen and red phosphorous free, for injection moulding

05.04.2016

TYPICAL PROPERTIES	CONDITION	STANDARD	UNIT	VALUE
PRODUCT IDENTIFICATION				
ISO 1043 abbreviation		ISO 1043		PA66/6 FR(30)
PHYSICAL				
Density		ISO 1183	[g/cm³]	1,17
Mold shrinkage parallel	72 hrs, 23°C, 50% RH	ISO 2577	[%]	1,0 ÷ 1,2
Mold shrinkage transverse	72 hrs, 23°C, 50% RH	ISO 2577	[%]	1,0 ÷ 1,2
MECHANICAL				dam / cond.*
Tensile modulus	1 mm/min	ISO 527	[MPa]	3600 / 1600
Tensile strain at break	50 mm/min	ISO 527	[%]	15 / >50
Tensile stress at yield	50 mm/min	ISO 527	[MPa]	80 / 45
Flexural modulus	2 mm/min	ISO 178	[MPa]	3300 / 1450
Flexural strength	2 mm/min	ISO 178	[MPa]	120 / 55
Charpy unnotched	+23 °C	ISO 179/1eU	[kJ/m²]	80 / NB
Charpy notched	+23 °C	ISO 179/1eA	[kJ/m²]	4 / 9
Izod impact unnotched	+23 °C	ISO 180/1U	[kJ/m²]	70 / NB
Izod impact notched	+23 °C	ISO 180/1A	[kJ/m²]	3,5 / 9
THERMAL				
Melting point	DSC	ISO 11357-1	[°C]	262
Heat Deflection Temperature (HDT-B)	0,45 MPa	ISO 75	[°C]	200
Heat Deflection Temperature (HDT-A)	1,80 MPa	ISO 75	[°C]	75
VICAT softening temperature	50°C/h - 50N	ISO 306	[°C]	215
ELECTRICAL				
Volume resistivity		IEC 60093	[Ω·cm]	1015
Surface resistivity		IEC 60093	[Ω]	10 ¹³
Comparative Tracking Index (CTI)	Solution A	IEC 60112	[V]	600
		120 00112	[-1	
BURNING BEHAVIOUR				
Flammability	0,4 mm	UL 94	[Class]	V-0
Flammability	1,5 mm	UL 94	[Class]	V-0
Flammability	3,0 mm	UL 94	[Class]	V-0
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]	750
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

PROCESSING CONDITIONS:

Drying temperature/time : 75-85°C / 2-4h (with dew point of dried air < -30 °C)

Recommended melt temperature : 260-280 °C Recommended mould temperature : 60-80 °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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^{*:} conditioned according to ISO 1110