DOMO® Engineering Plastics Technical Data Sheet



DOMAMID® 6G60HCE

Polyamide 6, 60% glass fiber reinforced, improved surfase finish, for injection moulding.

23.01.2014

TYPICAL PROPERTIES	CONDITION	STANDARD	UNIT	VALUE
PHYSICAL	_			
Density	_	ISO 1183	[g/cm³]	1,66
Mold shrinkage parallel	72 hrs, 23°C, 50% RH	ISO 2577	[%]	$0.1 \div 0.3$
Mold shrinkage transverse	72 hrs, 23°C, 50% RH	ISO 2577	[%]	0,3 ÷ 0,5
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RHEOLOGICAL				
Viscosity number		ISO 307	[ml/g]	125
MECHANICAL				
Tensile modulus	1 mm/min	ISO 527	[MPa]	22000
Tensile stress at break	5 mm/min	ISO 527	[MPa]	240
Tensile strain at break	5 mm/min	ISO 527	[%]	2
Flexural modulus	2 mm/min	ISO 178	[MPa]	18500
Flexural strength	2 mm/min	ISO 178	[MPa]	380
Charpy unnotched	+23 °C	ISO 179/1eU	[kJ/m²]	80
Charpy notched	+23 °C	ISO 179/1eA	[kJ/m²]	16
Izod impact unnotched	+23 °C	ISO 180/1A	[kJ/m²]	75
Izod impact notched	+23 °C	ISO 180/1A	[kJ/m²]	17
THERMAL				
Melting point	DSC	ISO 11357-1	[°C]	222
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]	210
ELECTRICAL				
Volume resistivity		IEC 93	[Ω·cm]	1015
Surface resistivity		IEC 93	[Ω]	1013
Comparative Tracking Index (CTI)	Solution A	IEC 112	[V]	500
BURNING BEHAVIOUR				
Flammability	0,8 mm	UL 94	[Class]	HB
Glow Wire Flammability Index (GWFI)	1 ÷ 3 mm	IEC 60695-2-12	[°C]	650
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:

 $\begin{array}{lll} \mbox{Drying temperature/time} & : 75 \div 95 \mbox{°C} \ / \ 2 \div 4 \mbox{h} \\ \mbox{Recommended melt temperature} & : 260 \div 290 \mbox{°C} \\ \mbox{Recommended mould temperature} & : 90 \div 100 \mbox{°C} \\ \end{array}$

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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