DOMO® Engineering Plastics
Technical Data Sheet

The strength of chemicals.

DOMAMID® 6G30UV1

(DOMAMID 6G30UV)

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

20.04.2016

TYPICAL PROPERTIES	CONDITION	STANDARD	UNIT	VALUE
PRODUCT IDENTIFICATION				
ISO 1043 abbreviation		ISO 1043		PA6-GF30
ISO 1874-1 designation		ISO 1874-1		PA6,ML,14-090,GF30
PHYSICAL				
Density		ISO 1183	[g/cm³]	1,36
Mold shrinkage parallel	72 hrs, 23°C, 50% RH	ISO 2577	[%]	0,3 - 0,5
Mold shrinkage transverse	72 hrs, 23°C, 50% RH	ISO 2577	[%]	0,8 - 1,0
RHEOLOGICAL				
Melt Volume Rate (MVR)	275 °C - 5,0 kg	ISO 1133	[cm³/10 min]	45
Viscosity number	96% H2SO4	ISO 307	[ml/g]	145
MECHANICAL				dam / cond.*
Tensile modulus	1 mm/min	ISO 527	[MPa]	9500 / 6000
Tensile stress at break	5 mm/min	ISO 527	[MPa]	180 / 110
Tensile strain at break	5 mm/min	ISO 527	[%]	3,5 / 6,0
Flexural modulus	2 mm/min	ISO 178	[MPa]	8500 / 5000
Flexural strength	2 mm/min	ISO 178	[MPa]	270 / 160
Charpy unnotched	+23 °C	ISO 179/1eU	[kJ/m²]	90 / 105
Charpy notched	+23 °C	ISO 179/1eA	[kJ/m²]	15 / 25
Izod impact unnotched	+23 °C	ISO 180/1U	[kJ/m²]	80 / 90
Izod impact notched	+23 °C	ISO 180/1A	[kJ/m²]	15 / 25
Hardness Rockwell		ISO 2039/2	[ScaleR]	122 / -
THERMAL				
Melting point	DSC	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]	200
VICAT softening temperature	50°C/h - 50N	ISO 306	[°C]	215
ELECTRICAL				
Volume resistivity		IEC 60093	[Ω·cm]	10^{15}
Surface resistivity		IEC 60093	[Ω]	10^{13}
Comparative Tracking Index (CTI)	Solution A	IEC 60112	[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
*: 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.