

DOMAMID® 6IK4

(DOMAMID 6STC4)

Polyamide 6, low temperature impact modified, for injection moulding

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TYPICAL PROPERTIES	CONDITION	STANDARD	UNIT	VALUE
PRODUCT IDENTIFICATION				
ISO 1043 abbreviation		ISO 1043		PA6-I
PHYSICAL				
Density		ISO 1183	[g/cm ³]	1,06
Mold shrinkage parallel	72 hrs, 23°C, 50% RH	ISO 2577	[%]	1,3 - 1,5
Mold shrinkage transverse	72 hrs, 23°C, 50% RH	ISO 2577	[%]	1,7 - 1,9
RHEOLOGICAL				
Viscosity number	96% H2SO4	ISO 307	[ml/g]	145
MECHANICAL				
				dam / cond.*
Tensile modulus	1 mm/min	ISO 527	[MPa]	1850 / 800
Tensile strain at break	50 mm/min	ISO 527	[%]	>50 / >50
Tensile stress at yield	50 mm/min	ISO 527	[MPa]	45 / 30
Flexural modulus	2 mm/min	ISO 178	[MPa]	1600 / 700
Flexural strength	2 mm/min	ISO 178	[MPa]	65 / 30
Charpy unnotched	+23 °C	ISO 179/1eU	[kJ/m ²]	NB / NB
Charpy unnotched	-30°C	ISO 179/1eU	[kJ/m ²]	NB / NB
Charpy notched	+23 °C	ISO 179/1eA	[kJ/m ²]	70 / 120
Charpy notched	-30°C	ISO 179/1eA	[kJ/m ²]	24 / -
Izod impact unnotched	+23 °C	ISO 180/1U	[kJ/m ²]	NB / NB
Izod impact notched	+23 °C	ISO 180/1A	[kJ/m ²]	70 / 120
Izod impact notched	-30°C	ISO 180/1A	[kJ/m ²]	22 / -
Hardness Rockwell		ISO 2039/2	[ScaleR]	100 / -
THERMAL				
Melting point	DSC	ISO 11357-1	[°C]	221
Heat Deflection Temperature (HDT-B)	0,45 MPa	ISO 75	[°C]	135
Heat Deflection Temperature (HDT-A)	1,80 MPa	ISO 75	[°C]	50
VICAT softening temperature	50°C/h - 50N	ISO 306	[°C]	170
ELECTRICAL				
Volume resistivity		IEC 60093	[Ω·cm]	10 ¹⁵
Surface resistivity		IEC 60093	[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 : 75-85°C / 2-4h (with dew point of dried air < -30 °C)
 Recommended melt temperature : 240-260 °C
 Recommended mould temperature : 60-90 °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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