

### DOMAMID® 6IK5

(DOMAMID 6STC5)

Polyamide 6, highly toughened also at low temperatures, for injection moulding.

preliminary datasheet

20.04.2016

TYPICAL PROPERTIES	CONDITION	STANDARD	UNIT	VALUE
<b>PRODUCT IDENTIFICATION</b>				
ISO 1043 abbreviation		ISO 1043		PA6-I
<b>PHYSICAL</b>				
Density		ISO 1183	[g/cm <sup>3</sup> ]	1,04
<b>MECHANICAL</b>				
Tensile modulus	1 mm/min	ISO 527	[MPa]	1650
Tensile strain at break	50 mm/min	ISO 527	[%]	>50
Tensile stress at yield	50 mm/min	ISO 527	[MPa]	40
Flexural modulus	2 mm/min	ISO 178	[MPa]	1500
Flexural strength	2 mm/min	ISO 178	[MPa]	60
Charpy unnotched	+23 °C	ISO 179/1eU	[kJ/m <sup>2</sup> ]	NB
Charpy unnotched	-30°C	ISO 179/1eU	[kJ/m <sup>2</sup> ]	NB
Charpy notched	+23 °C	ISO 179/1eA	[kJ/m <sup>2</sup> ]	70
Izod impact unnotched	+23 °C	ISO 180/1U	[kJ/m <sup>2</sup> ]	NB
Izod impact notched	+23 °C	ISO 180/1A	[kJ/m <sup>2</sup> ]	70
<b>THERMAL</b>				
Melting point	DSC	ISO 11357-1	[°C]	221
Heat Deflection Temperature (HDT-B)	0,45 MPa	ISO 75	[°C]	130
Heat Deflection Temperature (HDT-A)	1,80 MPa	ISO 75	[°C]	50
VICAT softening temperature	50°C/h - 50N	ISO 306	[°C]	165
<b>ELECTRICAL</b>				
Volume resistivity		IEC 60093	[Ω·cm]	10 <sup>15</sup>
Surface resistivity		IEC 60093	[Ω]	10 <sup>13</sup>
<b>BURNING BEHAVIOUR</b>				
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

#### 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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