

Issued: 31 May 2006
Updated: 10 Oct 2011

Domamid A1-001-N1-N

Polyamide 6, medium viscosity injection moulding grade, natural

Properties	Unit	Test method	Value
General Properties			
Density	g/cm ³	ISO 1183/A	1.12
Ash content (650°C)	%	ISO 3451	-
Viscosity number (sulfuric acid)	cm ³ /g	ISO 307	145
Melt Volume Flow Rate - MVR (275°C/ 5 kg)	cm ³ /10 min	ISO 1133	165
Moisture absorption (23°C/50% RH, 24 h)	%	ISO R 62	0.3
Water absorption (23°C, 24 h in water)	%	ISO R 62	2.4
Moulding shrinkage (between 16-72 hrs, 23°C, 50% RH)			
length	%	ISO 2577	1.05
width	%	ISO 2577	0.95
Mechanical properties (Dry as Molded)			
Tensile modulus of elasticity (v = 1mm/min)	MPa	ISO 527-1A	3400
Tensile yield stress (v = 5 mm/min)	MPa	ISO 527-1A	90
Tensile yield strain (v = 5 mm/min)	%	ISO 527-1A	4
Tensile stress at break (v = 5 mm/min)	MPa	ISO 527-1A	50
Tensile strain at break (v = 5 mm/min)	%	ISO 527-1A	20
Charpy impact strength notched	+ 23°C	ISO 179/1eA	5
	- 30°C	ISO 179/1eA	-
Charpy impact strength unnotched	+ 23°C	ISO 179/1eU	N
	- 30°C	ISO 179/1eU	-
Ball indentation hardness	N/mm ²	ISO 2039-1	153
Thermal properties			
Melting point, DSC	°C	ISO 11357-1	221
Heat deflection temperature:			
- HDT/A (1.8 MPa)	°C	ISO 75-2	66
- HDT/B (0.45 MPa)	°C	ISO 75-2	156
Vicat softening temperature:			
- VST/A/50 (10N)	°C	ISO 306	215
- VST/B/50 (50N)	°C	ISO 306	199
Burning Behaviour			
Burning rate (FMVSS302) 2mm	mm/min	ISO 3795	34
Glow wire temperature 2mm	°C	VDE 0471-2	750
Glow wire temperature 3 mm	°C	VDE 0471-2	-
Flammability UL 94, thickness 1.5 mm		UL 94	-
Flammability UL 94, thickness 3.0 mm		UL 94	-
Electrical properties			
Volume resistivity	Ohm.cm	VDE 0303-3	10 ¹⁵
Surface resistivity	Ohm	VDE 0303-3	10 ¹⁴

For more information:

Domo Engineering Plastics GmbH, Paul-Schlack-Straße, 14727 Premnitz, Germany

Tel: +49 (0)3386 24 2276 Fax: +49 (0)3386 24 2266 Email: compounds@domo.org

Domo cannot anticipate all conditions under which this information and our products of other manufactures in combination with our products may be used. Domo accepts no responsibility for results obtained by the application of this information or the safety and suitability of our products alone or in combination with other products. Users are advised to make their own tests to determine the safety and suitability of each such product or product combination for their own purposes. Unless otherwise agreed in writing, Domo sells the product without warranty, and buyers and users assume all responsibility and liability for loss or damage arising from handling and use of our products, whether used alone or in combination with other products. The property values quoted are typical of European produced grades only and do not constitute a specification. Unless specifically indicated, the grades mentioned are not suitable for applications in the pharmaceutical/medical sector.