

## Domamid A1-018-V35-N

Polyamide 6, medium viscosity, 35% glass fiber reinforced, natural

Properties	Unit	Test method	Value
<b>General Properties</b>			
Density	g/cm <sup>3</sup>	ISO 1183/A	1.40
Ash content (650°C)	%	ISO 3451	35
Viscosity number (sulfuric acid)	cm <sup>3</sup> /g	ISO 307	145
Melt Volume Flow Rate - MVR (275°C/ 5 kg)	cm <sup>3</sup> /10 min	ISO 1133	35
Moisture absorption (23°C/50% RH, 24 h)	%	ISO R 62	0.2
Water absorption (23°C, 24 h in water)	%	ISO R 62	1.7
Moulding shrinkage (between 16-72 hrs, 23°C, 50% RH)			
length	%	ISO 2577	0.35
width	%	ISO 2577	1.00
<b>Mechanical properties (Dry as Molded)</b>			
Tensile modulus of elasticity (v = 1 mm/min)	MPa	ISO 527-1A	10500
Tensile yield stress (v = 5 mm/min)	MPa	ISO 527-1A	-
Tensile yield strain (v = 5 mm/min)	%	ISO 527-1A	-
Tensile stress at break (v = 5 mm/min)	MPa	ISO 527-1A	190
Tensile strain at break (v = 5 mm/min)	%	ISO 527-1A	3.3
Flexural modulus (v = 5 mm/min)	MPa	ISO 178	8500
Flexural strength (v = 5 mm/min)	MPa	ISO 178	300
Charpy impact strength notched			
+ 23°C	kJ/m <sup>2</sup>	ISO 179/1eA	16
- 30°C	kJ/m <sup>2</sup>	ISO 179/1eA	12
Charpy impact strength unnotched			
+ 23°C	kJ/m <sup>2</sup>	ISO 179/1eU	100
- 30°C	kJ/m <sup>2</sup>	ISO 179/1eU	77
Ball indentation hardness	N/mm <sup>2</sup>	ISO 2039-1	217
<b>Thermal properties</b>			
Melting point, DSC	°C	ISO 11357-1	221
Heat deflection temperature:			
- HDT/A (1.8 MPa)	°C	ISO 75-2	210
- HDT/B (0.45 MPa)	°C	ISO 75-2	220
Vicat softening temperature:			
- VST/A/50 (10N)	°C	ISO 306	217
- VST/B/50 (50N)	°C	ISO 306	214
<b>Burning Behaviour</b>			
Burning rate (FMVSS302) 2mm	mm/min	ISO 3795	35
Glow wire temperature 2mm	°C	VDE 0471-2	650
Glow wire temperature 3 mm	°C	VDE 0471-2	-
Flammability UL 94, thickness 1.5 mm		UL 94	HB
Flammability UL 94, thickness 3.0 mm		UL 94	HB
<b>Electrical properties</b>			
Volume resistivity	Ohm.cm	VDE 0303-3	10 <sup>15</sup>
Surface resistivity	Ohm	VDE 0303-3	10 <sup>14</sup>

### For more information:

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