

Domamid A1-005-V50-N

Polyamide 6, medium viscosity, 50% glass fiber reinforced, natural

| Properties | Unit | Test method | Value |
|--|-------------------------|-------------|-------|
| General Properties | | | |
| Density | g/cm ³ | ISO 1183/A | 1.56 |
| Ash content (650°C) | % | ISO 3451 | 50 |
| 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 | 25 |
| Moisture absorption (23°C/50% RH, 24 h) | % | ISO R 62 | - |
| Water absorption (23°C, 24 h in water) | % | ISO R 62 | - |
| Moulding shrinkage (between 16-72 hrs, 23°C, 50% RH) | | | |
| length | % | ISO 2577 | 0.35 |
| width | % | ISO 2577 | 1.00 |
| Mechanical properties (Dry as Molded) | | | |
| Tensile modulus of elasticity (v = 1 mm/min) | MPa | ISO 527-1A | 17000 |
| Tensile yield stress (v = 5 mm/min) | MPa | ISO 527-1A | 235 |
| Tensile yield strain (v = 5 mm/min) | % | ISO 527-1A | - |
| Tensile stress at break (v = 5 mm/min) | MPa | ISO 527-1A | 235 |
| Tensile strain at break (v = 5 mm/min) | % | ISO 527-1A | 2.8 |
| Flexural modulus (v = 5 mm/min) | MPa | ISO 178 | 12500 |
| Flexural strength (v = 5 mm/min) | MPa | ISO 178 | 370 |
| Charpy impact strength notched | | | |
| + 23°C | kJ/m ² | ISO 179/1eA | 18 |
| - 30°C | kJ/m ² | ISO 179/1eA | - |
| Charpy impact strength unnotched | | | |
| + 23°C | kJ/m ² | ISO 179/1eU | 110 |
| - 30°C | kJ/m ² | ISO 179/1eU | - |
| Ball indentation hardness | N/mm ² | ISO 2039-1 | - |
| Thermal properties | | | |
| Melting point, DSC | °C | ISO 11357-1 | 221 |
| Heat deflection temperature: | | | |
| - HDT/A (1.8 MPa) | °C | ISO 75-2 | - |
| - HDT/B (0.45 MPa) | °C | ISO 75-2 | - |
| Vicat softening temperature: | | | |
| - VST/A/50 (10N) | °C | ISO 306 | - |
| - VST/B/50 (50N) | °C | ISO 306 | - |
| Burning Behaviour | | | |
| Burning rate (FMVSS302) 2mm | mm/min | ISO 3795 | - |
| Glow wire temperature 2mm | °C | VDE 0471-2 | - |
| 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 |
| Electrical properties | | | |
| Volume resistivity | Ohm.cm | VDE 0303-3 | - |
| Surface resistivity | Ohm | VDE 0303-3 | - |

For more information:

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