

DOMAMID® A1-004-V40-N

Polyamide 6, medium viscosity, 40% glass fiber reinforced, natural

08.05.2013

| TYPICAL PROPERTIES | CONDITION | STANDARD | UNIT | VALUE |
|-------------------------------------|-----------------|-------------|---------------------------|-------|
| PHYSICAL | | | | |
| Density | | ISO 1183 | [g/cm ³] | 1,45 |
| RHEOLOGICAL | | | | |
| Melt Volume Rate (MVR) | 275 °C - 5,0 kg | ISO 1133 | [cm ³ /10 min] | 25 |
| Viscosity number | | ISO 307 | [ml/g] | 145 |
| MECHANICAL | | | | |
| Tensile modulus | 1 mm/min | ISO 527 | [MPa] | 12000 |
| Tensile stress at break | 5 mm/min | ISO 527 | [MPa] | 200 |
| Tensile strain at break | 5 mm/min | ISO 527 | [%] | 3 |
| Flexural modulus | 5 mm/min | ISO 178 | [MPa] | 10000 |
| Flexural strength | 5 mm/min | ISO 178 | [MPa] | 310 |
| Charpy unnotched | +23 °C | ISO 179/1eU | [kJ/m ²] | 105 |
| Charpy unnotched | -30 °C | ISO 179/1eU | [kJ/m ²] | 80 |
| Charpy notched | +23 °C | ISO 179/1eA | [kJ/m ²] | 18 |
| Charpy notched | -30 °C | ISO 179/1eA | [kJ/m ²] | 13 |
| THERMAL | | | | |
| Melting point | | ISO 11357-1 | [°C] | 221 |
| Heat Deflection Temperature (HDT-B) | 0,45 MPa | ISO 75 | [°C] | 220 |
| Heat Deflection Temperature (HDT-A) | 1,80 MPa | ISO 75 | [°C] | 210 |
| VICAT softening temperature | 50°C/h - 50N | ISO 306 | [°C] | 214 |
| ELECTRICAL | | | | |
| Volume resistivity | | IEC 93 | [Ω·cm] | 1E+15 |
| Surface resistivity | | IEC 93 | [Ω] | 1E+15 |
| BURNING BEHAVIOUR | | | | |
| Flammability | 1,5 - 3,0 mm | UL 94 | [Class] | HB |
| Burning rate (FMVSS) | | FMVSS 302 | [mm/min] | 23 |

Test run at 23°C if not differently specified, DAM state (dry as moulded).

PROCESSING CONDITIONS:

| | |
|-------------------------------|--------------|
| Drying temperature/time | : 80°C/2-4h |
| Recommended melt temperature | : 250-290 °C |
| Recommended mould temperature | : 80-100 °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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