

DOMAMID® 6LVG60

Polyamide 6, 60% glass fiber reinforced, improved flowability, for injection moulding

02.12.2016

| TYPICAL PROPERTIES | CONDITION | STANDARD | UNIT | VALUE |
|-------------------------------------|----------------------|----------------|----------------------|-------------------|
| PRODUCT IDENTIFICATION | | | | |
| ISO 1043 abbreviation | | ISO 1043 | | PA6-GF60 |
| ISO 1874-1 designation | | ISO 1874-1 | | PA6,M,12-220,GF60 |
| PHYSICAL | | | | |
| Density | | ISO 1183 | [g/cm ³] | 1,66 |
| Mold shrinkage parallel | 72 hrs, 23°C, 50% RH | ISO 2577 | [%] | 0,1 ÷ 0,3 |
| Mold shrinkage transverse | 72 hrs, 23°C, 50% RH | ISO 2577 | [%] | 0,3 ÷ 0,5 |
| Water absorption | T=23°C / sat. | ISO 62 | [%] | 4 |
| RHEOLOGICAL | | | | |
| Viscosity number | 96% H2SO4 | ISO 307 | [ml/g] | 125 |
| MECHANICAL | | | | |
| | | | | dam / cond.* |
| Tensile modulus | 1 mm/min | ISO 527 | [MPa] | 20500 / 12500 |
| Tensile stress at break | 5 mm/min | ISO 527 | [MPa] | 230 / 140 |
| Tensile strain at break | 5 mm/min | ISO 527 | [%] | 2,5 / 4,5 |
| Flexural modulus | 2 mm/min | ISO 178 | [MPa] | 17500 / 10500 |
| Flexural strength | 2 mm/min | ISO 178 | [MPa] | 350 / 210 |
| Charpy unnotched | +23 °C | ISO 179/1eU | [kJ/m ²] | 75 / 90 |
| Charpy notched | +23 °C | ISO 179/1eA | [kJ/m ²] | 15 / 22 |
| Izod impact unnotched | +23 °C | ISO 180/1U | [kJ/m ²] | 70 / 85 |
| Izod impact notched | +23 °C | ISO 180/1A | [kJ/m ²] | 15 / 20 |
| THERMAL | | | | |
| Melting point | DSC | 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] | 210 |
| ELECTRICAL | | | | |
| Volume resistivity | | IEC 62631-3-1 | [Ω·cm] | 10 ¹⁵ |
| Surface resistivity | | IEC 62631-3-2 | [Ω] | 10 ¹³ |
| Comparative Tracking Index (CTI) | Solution A | IEC 60112 | [V] | 500 |
| BURNING BEHAVIOUR | | | | |
| Flammability | 0,8 mm | UL 94 | [Class] | HB |
| Glow Wire Flammability Index (GWFI) | 1 - 3 mm | IEC 60695-2-12 | [°C] | 650 |
| 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

*: conditioned according to ISO 1110

PROCESSING CONDITIONS:

| | |
|-------------------------------|---|
| Drying temperature/time | : 75-85°C / 2-4h (with dew point of dried air < -30 °C) |
| Recommended melt temperature | : 250-280 °C |
| Recommended mould temperature | : 90-100 °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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