

08.03.2016

DOMAMID® 6LV

(DOMAMID 6AF)

Polyamide 6, high fluidity, for injection moulding.

| TYPICAL PROPERTIES | CONDITION | STANDARD | UNIT | VALUE |
|---------------------------------------|------------------------------------|----------------|---------------------------|------------------|
| PRODUCT IDENTIFICATION | | | | |
| ISO 1043 abbreviation | | ISO 1043 | | PA6 |
| ISO 1874-1 designation | | ISO 1874-1 | | PA6,M,12-030 |
| PHYSICAL | | | | |
| Density | | ISO 1183 | [g/cm ³] | 1,14 |
| Mold shrinkage parallel | 72 hrs, 23°C, 50% RH | ISO 2577 | [%] | 0,9 ÷ 1,1 |
| Mold shrinkage transverse | 72 hrs, 23°C, 50% RH | ISO 2577 | [%] | 1,0 ÷ 1,2 |
| RHEOLOGICAL | | | | |
| Melt Volume Rate (MVR) | 275 °C - 5,0 kg | ISO 1133 | [cm ³ /10 min] | 225 |
| Viscosity number | 96% H ₂ SO ₄ | ISO 307 | [ml/g] | 125 |
| MECHANICAL | | | | |
| Tensile modulus | 1 mm/min | ISO 527 | [MPa] | 3100 |
| Tensile strain at break | 50 mm/min | ISO 527 | [%] | 50 |
| Tensile stress at yield | 50 mm/min | ISO 527 | [MPa] | 80 |
| Flexural modulus | 2 mm/min | ISO 178 | [MPa] | 2700 |
| Flexural strength | 2 mm/min | ISO 178 | [MPa] | 100 |
| Charpy unnotched | +23 °C | ISO 179/1eU | [kJ/m ²] | NB |
| Charpy notched | +23 °C | ISO 179/1eA | [kJ/m ²] | 4 |
| Izod impact unnotched | +23 °C | ISO 180/1U | [kJ/m ²] | NB |
| Izod impact notched | +23 °C | ISO 180/1A | [kJ/m ²] | 4 |
| Hardness Rockwell | | ISO 2039/2 | [ScaleR] | 120 |
| THERMAL | | | | |
| Melting point | DSC | ISO 11357-1 | [°C] | 221 |
| Heat Deflection Temperature (HDT-B) | 0,45 MPa | ISO 75 | [°C] | 180 |
| Heat Deflection Temperature (HDT-A) | 1,80 MPa | ISO 75 | [°C] | 70 |
| VICAT softening temperature | 50°C/h - 50N | ISO 306 | [°C] | 205 |
| ELECTRICAL | | | | |
| Volume resistivity | | IEC 60093 | [Ω·cm] | 10 ¹⁵ |
| Surface resistivity | | IEC 60093 | [Ω] | 10 ¹³ |
| Comparative Tracking Index (CTI) | Solution A | IEC 60112 | [V] | 600 |
| BURNING BEHAVIOUR | | | | |
| Flammability | 0,75 mm | UL 94 | [Class] | V-2 |
| Flammability | 1,5 mm | UL 94 | [Class] | V-2 |
| Flammability | 3,0 mm | UL 94 | [Class] | V-2 |
| Glow Wire Flammability Index (GWFI) | 1 - 3 mm | IEC 60695-2-12 | [°C] | 850 |
| Glow Wire Ignition Temperature (GWIT) | 1 - 3 mm | IEC 60695-2-13 | [°C] | 725 |
| 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

PROCESSING CONDITIONS:

Drying temperature/time : 75-85°C / 2-4h (with dew point of dried air < -30 °C)
 Recommended melt temperature : 230-250 °C
 Recommended mould temperature : 60-90 °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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