DOMO® Engineering Plastics Technical Data Sheet



DOMAMID® 66G33

(DOMAMID 66G33)

Polyamide 66, 33% glass fiber reinforced, for injection moulding

20.04.2016

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|---|----------------------|-----------------------|------------|-------------------|
| TYPICAL PROPERTIES | CONDITION | STANDARD | UNIT | VALUE |
| PRODUCT IDENTIFICATION | | | | |
| ISO 1043 abbreviation | | ISO 1043 | | PA66-GF33 |
| ISO 1874-1 designation | | ISO 1874-1 | | PA6,M,14-100,GF33 |
| | | | | -, ,, |
| PHYSICAL | | | | |
| Density | | ISO 1183 | [g/cm³] | 1,38 |
| Mold shrinkage parallel | 72 hrs, 23°C, 50% RH | ISO 2577 | [%] | $0.2 \div 0.4$ |
| Mold shrinkage transverse | 72 hrs, 23°C, 50% RH | ISO 2577 | [%] | $0.6 \div 0.8$ |
| RHEOLOGICAL | _ | | | |
| Viscosity number | 96% H2SO4 | ISO 307 | [ml/g] | 145 |
| MECHANICAL | _ | | | |
| Tensile modulus | 1 mm/min | ISO 527 | [MPa] | 10000 |
| Tensile stress at break | 5 mm/min | ISO 527 | [MPa] | 185 |
| Tensile strain at break | 5 mm/min | ISO 527 | [%] | 3 |
| Flexural modulus | 2 mm/min | ISO 178 | [MPa] | 8700 |
| Flexural strength | 2 mm/min | ISO 178 | [MPa] | 275 |
| Charpy unnotched | +23 °C | ISO 179/1eU | [kJ/m²] | 70 |
| Charpy notched | +23 °C | ISO 179/1eA | [kJ/m²] | 12 |
| Izod impact unnotched | +23 °C | ISO 180/1U | [kJ/m²] | 65 |
| Izod impact notched | +23 °C | ISO 180/1A | [kJ/m²] | 11 |
| THERMAL | _ | | | |
| THERMAL Molting point | DSC | ISO 11357-1 | [°C] | 262 |
| Melting point Heat Deflection Temperature (HDT-B) | 0,45 MPa | ISO 11357-1 ISO 75 | [°C] | 255 |
| Heat Deflection Temperature (HDT-B) | • | ISO 75 ISO 75 | | 255 250 |
| | 1,80 MPa | | [°C] | |
| VICAT softening temperature | 50°C/h - 50N | ISO 306 | [°C] | 255 |
| ELECTRICAL | | | | |
| Volume resistivity | | IEC 60093 | [Ω·cm] | 1015 |
| Surface resistivity | | IEC 60093 | $[\Omega]$ | 1013 |
| Comparative Tracking Index (CTI) | Solution A | IEC 60112 | [V] | 500 |
| BURNING BEHAVIOUR | _ | | | |
| Flammability | 0,8 mm | UL 94 | [Class] | НВ |
| 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

PROCESSING CONDITIONS:

Drying temperature/time : 75-85°C / 2-4h (with dew point of dried air < -30 °C)

Recommended melt temperature : 270-290 °C Recommended mould temperature : 90-110 °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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