Property Data

Envalior
Imagine the Future

# EcoPaXX® Q–HXGM24

## PA410–(GF+MD)30

*10% Glass Reinforced, 20% Mineral Reinforced, Heat Stabilized*

Print Date: 2024–04–16

EcoPaXX® Q–HXGM24 is a long aliphatic polyamide with excellent surface esthetics and low warpage with good thermal properties and high flow for use in beauty covers.

### Sustainability

Bio–based

| PROPERTIES | TYPICAL DATA | UNIT | TEST METHOD |
|---|---|---|---|
| **RHEOLOGICAL PROPERTIES** | DRY / COND | | |
| Molding shrinkage (parallel) | 0.76 / * | % | ISO 294–4 |
| Molding shrinkage (normal) | 1.25 / * | % | ISO 294–4 |
| **MECHANICAL PROPERTIES** | DRY / COND | | |
| Tensile modulus | 7500 / 6000 | MPa | ISO 527–1/–2 |
| Stress at break | 100 / 65 | MPa | ISO 527–1/–2 |
| Strain at break | 2.6 / 3.6 | % | ISO 527–1/–2 |
| Tensile modulus (80°C) | 2500 / – | MPa | ISO 527–1/–2 |
| Stress at break (80°C) | 45 / – | MPa | ISO 527–1/–2 |
| Strain at break (80°C) | 11 / – | % | ISO 527–1/–2 |
| Tensile modulus (120°C) | 2100 / – | MPa | ISO 527–1/–2 |
| Stress at break (120°C) | 25 / – | MPa | ISO 527–1/–2 |
| Strain at break (120°C) | 12 / – | % | ISO 527–1/–2 |
| Tensile modulus (160°C) | 1600 | MPa | ISO 527–1/–2 |
| Stress at break (160°C) | 20 | MPa | ISO 527–1/–2 |
| Strain at break (160°C) | 20 | % | ISO 527–1/–2 |
| Charpy impact strength (+23°C) | 35 / 40 | kJ/m² | ISO 179/1eU |
| Charpy impact strength (–30°C) | 30 / 35 | kJ/m² | ISO 179/1eU |

*Property Data*

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| PROPERTIES | TYPICAL DATA | UNIT | TEST METHOD |
|---|---|---|---|
| Charpy notched impact strength (+23°C) | 3.5 / 5 | kJ/m² | ISO 179/1eA |
| Charpy notched impact strength (–30°C) | 4 / 3 | kJ/m² | ISO 179/1eA |
| Flexural modulus | 6700 / – | MPa | ISO 178 |
| Flexural strength | 170 / – | MPa | ISO 178 |

| THERMAL PROPERTIES | DRY / COND | | |
|---|---|---|---|
| Melting temperature (10°C/min) | 250 / * | °C | ISO 11357–1/–3 |
| Temp. of deflection under load (1.80 MPa) | 190 / * | °C | ISO 75–1/–2 |
| Temp. of deflection under load (0.45 MPa) | 225 / * | °C | ISO 75–1/–2 |
| Coeff. of linear therm. expansion (parallel) | 0.39 / * | E–4/°C | ISO 11359–1/–2 |
| Coeff. of linear therm. expansion (normal) | 0.68 / * | E–4/°C | ISO 11359–1/–2 |

| OTHER PROPERTIES | DRY / COND | | |
|---|---|---|---|
| Humidity absorption | 1.5 / * | % | Sim. to ISO 62 |
| Density | 1340 / – | kg/m³ | ISO 1183 |