Property Data

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# Durethan® DPAKV50HRH2.0

## PA66–GF50

*50% Glass Reinforced, Injection Molding, Heat Stabilized, Hydrolysis resistant*

| PROPERTIES | TYPICAL DATA | UNIT | TEST METHOD |
|---|---|---|---|
| **RHEOLOGICAL PROPERTIES** | DRY / COND | | |
| Molding shrinkage (parallel) | 0.35 / * | % | ISO 294–4 |
| Molding shrinkage (normal) | 0.9 / * | % | ISO 294–4 |
| **MECHANICAL PROPERTIES** | DRY / COND | | |
| Tensile modulus | 15800 / 10500 | MPa | ISO 527–1/–2 |
| Stress at break | 225 / 160 | MPa | ISO 527–1/–2 |
| Strain at break | 2.7 / 4.5 | % | ISO 527–1/–2 |
| Flexural modulus | 15500 / 11000 | MPa | ISO 178 |
| Flexural strength | 355 / 260 | MPa | ISO 178 |
| Charpy impact strength (+23°C) | 100 / 95 | kJ/m² | ISO 179/1eU |
| Charpy impact strength (–30°C) | 100 / 100 | kJ/m² | ISO 179/1eU |
| Charpy notched impact strength (+23°C) | 15 / 20 | kJ/m² | ISO 179/1eA |
| Charpy notched impact strength (–30°C) | 12 / 13 | kJ/m² | ISO 179/1eA |
| Izod notched impact strength (+23°C) | 15 / 20 | kJ/m² | ISO 180/1A |
| **THERMAL PROPERTIES** | DRY / COND | | |
| Melting temperature (10°C/min) | 261 / * | °C | ISO 11357–1/–3 |
| Temp. of deflection under load (1.80 MPa) | 245 / * | °C | ISO 75–1/–2 |
| Temp. of deflection under load (0.45 MPa) | 250 / * | °C | ISO 75–1/–2 |
| Coeff. of linear therm. expansion (parallel) | 0.2 / * | E–4/°C | ISO 11359–1/–2 |
| Coeff. of linear therm. expansion (normal) | 0.7 / * | E–4/°C | ISO 11359–1/–2 |
| **OTHER PROPERTIES** | DRY / COND | | |

*Property Data*

# *Durethan® DPAKV50HRH2.0*

| *PROPERTIES* | *TYPICAL DATA* | *UNIT* | *TEST METHOD* |
|---|---|---|---|
| Water absorption | 4.6 / * | % | Sim. to ISO 62 |
| Humidity absorption | 1.5 / * | % | Sim. to ISO 62 |
| Density | 1570 / – | kg/m³ | ISO 1183 |

| *PROCESSING RECOMMENDATIONS* | *VALUE* | | |
|---|---|---|---|
| Drying temperature dry air dryer | 80 | °C | |
| Drying time dry air dryer | 2–6 | h | |
| Residual moisture content | 0.03–0.12 | % | acc. to Karl Fischer |
| Melt temperature (Tmin – Tmax) | 280–300 | °C | |
| Mold temperature | 80–120 | °C | |