

# Durethan® BKV35PH2.0

## PA6—GF35

35% Glass Reinforced, Injection Molding, Heat Stabilized

| PROPERTIES                                   | TYPICAL DATA | UNIT   | TEST METHOD    |
|----------------------------------------------|--------------|--------|----------------|
| <b>RHEOLOGICAL PROPERTIES</b>                |              |        |                |
|                                              | DRY / COND   |        |                |
| Molding shrinkage (parallel)                 | 0.25 / *     | %      | ISO 294-4      |
| Molding shrinkage (normal)                   | 0.7 / *      | %      | ISO 294-4      |
| <b>MECHANICAL PROPERTIES</b>                 |              |        |                |
|                                              | DRY / COND   |        |                |
| Tensile modulus                              | 11500 / 6800 | MPa    | ISO 527-1/-2   |
| Stress at break                              | 185 / 115    | MPa    | ISO 527-1/-2   |
| Strain at break                              | 3.5 / 8      | %      | ISO 527-1/-2   |
| Flexural modulus                             | 11000 / 6500 | MPa    | ISO 178        |
| Flexural strength                            | 295 / 185    | MPa    | ISO 178        |
| Tensile modulus (200°C)                      | 3400         | MPa    | ISO 527-1/-2   |
| Charpy impact strength (+23°C)               | 90 / 100     | kJ/m²  | ISO 179/1eU    |
| Charpy impact strength (-30°C)               | 75 / 70      | kJ/m²  | ISO 179/1eU    |
| Charpy notched impact strength (+23°C)       | 12 / 20      | kJ/m²  | ISO 179/1eA    |
| Charpy notched impact strength (-30°C)       | 10 / <10     | kJ/m²  | ISO 179/1eA    |
| Izod notched impact strength (+23°C)         | 15 / 20      | kJ/m²  | ISO 180/1A     |
| <b>THERMAL PROPERTIES</b>                    |              |        |                |
|                                              | DRY / COND   |        |                |
| Melting temperature (10°C/min)               | 220 / *      | °C     | ISO 11357-1/-3 |
| Temp. of deflection under load (1.80 MPa)    | 205 / *      | °C     | ISO 75-1/-2    |
| Temp. of deflection under load (0.45 MPa)    | 220 / *      | °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)   | 0.95 / *     | E-4/°C | ISO 11359-1/-2 |



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| PROPERTIES                       | TYPICAL DATA | UNIT  | TEST METHOD          |
|----------------------------------|--------------|-------|----------------------|
| OTHER PROPERTIES                 | DRY / COND   |       |                      |
| Water absorption                 | 6.5 / *      | %     | Sim. to ISO 62       |
| Humidity absorption              | 1.9 / *      | %     | Sim. to ISO 62       |
| Density                          | 1410 / –     | 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)   | 270–290      | °C    |                      |
| Mold temperature                 | 80–120       | °C    |                      |

