

## Durethan® AKV30GHR 900116 DUS023 PA66-GF30

Envalior

Injection Molding, 30% Glass Reinforced, Heat Stabilized, Hydrolysis resistant, Improved flow, Excellent Surface Properties

ISO 1043 PA66-GF30

| Rheological properties<br>ISO Data | dry / cond | Unit | Test Standard   |
|------------------------------------|------------|------|-----------------|
| Molding shrinkage, parallel        | 0.6 / *    | %    | ISO 294-4, 2577 |
| Molding shrinkage, normal          | 0.8 / *    | %    | ISO 294-4, 2577 |

| Mechanical Properties                   | dry / cond  | Unit  | Test Standard |
|---|-------------|-------|---------------|
| ISO Data                                |             |       |               |
| Tensile Modulus                         | 8500 / 5600 | MPa   | ISO 527       |
| Stress at Break                         | 135 / 90    | MPa   | ISO 527       |
| Strain at Break                         | 3.2 / 6.5   | %     | ISO 527       |
| Impact Strength (Charpy), +23°C         | 70 / 65     | kJ/m² | ISO 179/1eU   |
| Impact Strength (Charpy), -30°C         | 55 / -      | kJ/m² | ISO 179/1eU   |
| Notched Impact Strength (Charpy), +23°C | - / 10      | kJ/m² | ISO 179/1eA   |
| Notched Impact Strength (Charpy), -30°C | - / 10      | kJ/m² | ISO 179/1eA   |
| Puncture - maximum force, +23°C         | 800 / -     | N     | ISO 6603-2    |
| Puncture - maximum force, -30°C         | 650 / -     | N     | ISO 6603-2    |
| Puncture energy, +23°C                  | 2.5 / -     | J     | ISO 6603-2    |
| Puncture energy, -30°C                  | 2 / -       | J     | ISO 6603-2    |

| Thermal Properties                          | dry / cond | Unit  | Test Standard  |
|---|------------|-------|----------------|
| ISO Data                                    |            |       |                |
| Melting Temperature (10°C/min)              | 259 / *    | °C    | ISO 11357-1/-3 |
| Temp. of deflection under load (1.80 MPa)   | 200 / *    | °C    | ISO 75-1/-2    |
| Temp. of deflection under load (0.45 MPa)   | 245 / *    | °C    | ISO 75-1/-2    |
| Coeff. of Linear Therm. Expansion, parallel | 30 / *     | E-6/K | ISO 11359-1/-2 |
| Coeff. of Linear Therm. Expansion, normal   | 90 / *     | E-6/K | ISO 11359-1/-2 |

| Other Properties | dry / cond | Unit  | Test Standard |
|------------------|------------|-------|---------------|
| ISO Data         |            |       |               |
| Density          | 1340 / -   | kg/m³ | ISO 1183      |

| Test specimen production<br>ISO Data | Value | Unit | Test Standard |
|--------------------------------------|-------|------|---------------|
| Injection Molding, melt temperature  | 290   | °C   | ISO 294       |
| Injection Molding, mold temperature  | 80    | °C   | ISO 294       |

| Processing Recommendation Injection Molding | Value     | Unit | Test Standard |
|---|-----------|------|---------------|
| Pre-drying - Temperature                    | 80        | °C   | -             |
| Pre-drying - Time                           | 2 - 6     | h    | -             |
| Processing humidity                         | ≤0.12     | %    | -             |
| Melt temperature                            | 280 - 300 | °C   | -             |
| Mold temperature                            | 80 - 120  | °C   | -             |

| Characteristics                         |                         |
|---|-------------------------|
| Processing                              | Special Characteristics |
| Injection Molding                       | Heat aging stabilized   |
| Delivery form                           | Chemical Resistance     |
| Pellets                                 | Hydrolysis              |
| Injection Molding                       |                         |
| PREPROCESSING                           |                         |
| Residual moisture content: 0.03 - 0.12% |                         |
| Drying temperature dry air dryer: 80 °C |                         |

Drying time dry air dryer 2 - 6 h

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PROCESSING

Melt temperature (Tmin - Tmax): 280 - 300 °C

Mold temperature: 80 - 120 °C

## Disclaimer

## Liability Exclusion

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