

# Akulon® Ultraflow K-FG0

## PA6-GF50

50% Glass Reinforced, High Flow

| Properties                                   | Typical Data | Unit              | Test Method     |
|--|--------------|-------------------|-----------------|
| <b>Rheological properties</b>                |              |                   |                 |
|  | dry / cond   |                   |                 |
| Molding shrinkage (parallel)                 | 0.38/*       | %                 | ISO 294-4       |
| Molding shrinkage (normal)                   | 0.88/*       | %                 | ISO 294-4       |
| <b>Mechanical properties</b>                 |              |                   |                 |
|  | dry / cond   |                   |                 |
| Tensile modulus                              | 16500/11000  | MPa               | ISO 527-1/-2    |
| Stress at break                              | 230/155      | MPa               | ISO 527-1/-2    |
| Strain at break                              | 2.5/5        | %                 | ISO 527-1/-2    |
| Flexural modulus                             | 14000/-      | MPa               | ISO 178         |
| Flexural strength                            | 310/-        | MPa               | ISO 178         |
| Charpy impact strength (+23°C)               | 90/100       | kJ/m <sup>2</sup> | ISO 179/1eU     |
| Charpy impact strength (-30°C)               | 85/85        | kJ/m <sup>2</sup> | ISO 179/1eU     |
| Charpy notched impact strength (+23°C)       | 15/25        | kJ/m <sup>2</sup> | ISO 179/1eA     |
| Charpy notched impact strength (-30°C)       | 12/12        | kJ/m <sup>2</sup> | ISO 179/1eA     |
| <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)    | 210/*        | °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) | 0.1/*        | E-4/°C            | ISO 11359-1/-2  |
| Coeff. of linear therm. expansion (normal)   | 0.5/*        | E-4/°C            | ISO 11359-1/-2  |
| Burning Behav. at 1.5 mm nom. thickn.        | HB/*         | class             | IEC 60695-11-10 |
| Thickness tested                             | 1.6/*        | mm                | IEC 60695-11-10 |
| <b>Electrical properties</b>                 |              |                   |                 |
|  | dry / cond   |                   |                 |
| Relative permittivity (100Hz)                | 3.5/14       | -                 | IEC 60250       |
| Relative permittivity (1 MHz)                | 5.2/4.5      | -                 | IEC 60250       |
| Dissipation factor (100 Hz)                  | 50/3000      | E-4               | IEC 60250       |
| Dissipation factor (1 MHz)                   | 150/1200     | E-4               | IEC 60250       |
| Volume resistivity                           | 1E13/1E11    | Ohm*m             | IEC 60093       |
| Surface resistivity                          | */1E14       | Ohm               | IEC 60093       |

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## Property Data

# Akulon<sup>®</sup> Ultraflow K-FG0

| Properties                 | Typical Data      | Unit              | Test Method    |
|----------------------------|-------------------|-------------------|----------------|
| Comparative tracking index | 600/-             | -                 | IEC 60112      |
| <b>Other properties</b>    | <b>dry / cond</b> |                   |                |
| Water absorption           | 4.5/*             | %                 | Sim. to ISO 62 |
| Humidity absorption        | 1.4/*             | %                 | Sim. to ISO 62 |
| Density                    | 1560/-            | kg/m <sup>3</sup> | ISO 1183       |

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