

# Arnite<sup>®</sup> AV2 390

## PET–GF50

50% Glass Reinforced

| PROPERTIES                                   | TYPICAL DATA | UNIT              | TEST METHOD       |
|----------------------------------------------|--------------|-------------------|-------------------|
| <b>RHEOLOGICAL PROPERTIES</b>                |              |                   |                   |
|                                              | VALUE        |                   |                   |
| Molding shrinkage [normal]                   | 0.8          | %                 | Sim. to ISO 294–4 |
| Molding shrinkage [parallel]                 | 0.2          | %                 | Sim. to ISO 294–4 |
| <b>MECHANICAL PROPERTIES</b>                 |              |                   |                   |
|                                              | VALUE        |                   |                   |
| Tensile modulus                              | 19000        | MPa               | ISO 527–1/–2      |
| Stress at break                              | 210          | MPa               | ISO 527–1/–2      |
| Strain at break                              | 2            | %                 | ISO 527–1/–2      |
| Flexural modulus                             | 17500        | MPa               | ISO 178           |
| Flexural strength                            | 330          | MPa               | ISO 178           |
| Charpy impact strength (+23°C)               | 55           | kJ/m <sup>2</sup> | ISO 179/1eU       |
| Charpy impact strength (–30°C)               | 55           | kJ/m <sup>2</sup> | ISO 179/1eU       |
| Charpy notched impact strength (+23°C)       | 9            | kJ/m <sup>2</sup> | ISO 179/1eA       |
| Charpy notched impact strength (–30°C)       | 9            | kJ/m <sup>2</sup> | ISO 179/1eA       |
| <b>THERMAL PROPERTIES</b>                    |              |                   |                   |
|                                              | VALUE        |                   |                   |
| Melting temperature (10°C/min)               | 255          | °C                | ISO 11357–1/–3    |
| Temp. of deflection under load (1.80 MPa)    | 240          | °C                | ISO 75–1/–2       |
| Temp. of deflection under load (0.45 MPa)    | 252          | °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)   | 0.35         | E–4/°C            | ISO 11359–1/–2    |
| <b>ELECTRICAL PROPERTIES</b>                 |              |                   |                   |
|                                              | VALUE        |                   |                   |
| Relative permittivity (100Hz)                | 3.8          | –                 | IEC 62631–2–1     |

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| PROPERTIES                       | TYPICAL DATA | UNIT  | TEST METHOD   |
|----------------------------------|--------------|-------|---------------|
| Relative permittivity (1 MHz)    | 3.5          | –     | IEC 62631–2–1 |
| Dissipation factor (100 Hz)      | 20           | E–4   | IEC 62631–2–1 |
| Dissipation factor (1 MHz)       | 110          | E–4   | IEC 62631–2–1 |
| Volume resistivity               | >1E13        | Ohm*m | IEC 62631–3–1 |
| Comparative tracking index       | 250          | V     | IEC 60112     |
| Comparative tracking index (PLC) | 2            | class | UL 746A       |

| OTHER PROPERTIES    | VALUE |       |                |
|---------------------|-------|-------|----------------|
| Water absorption    | 0.3   | %     | Sim. to ISO 62 |
| Humidity absorption | 0.12  | %     | Sim. to ISO 62 |
| Density             | 1780  | kg/m³ | ISO 1183       |

## Viscosity–shear rate

