

# Arnite<sup>®</sup> TV4 260 SN

## PBT–GF30 FR(17)

30% Glass Reinforced, Flame Retardant

| PROPERTIES                                   | TYPICAL DATA | UNIT              | TEST METHOD     |
|--|--------------|-------------------|-----------------|
| <b>MECHANICAL PROPERTIES</b>                 |              |                   |                 |
|  | <b>VALUE</b> |                   |                 |
| Tensile modulus                              | 11000        | MPa               | ISO 527-1/-2    |
| Stress at break                              | 140          | MPa               | ISO 527-1/-2    |
| Strain at break                              | 2.5          | %                 | ISO 527-1/-2    |
| Charpy impact strength (+23°C)               | 50           | kJ/m <sup>2</sup> | ISO 179/1eU     |
| Charpy impact strength (-30°C)               | 50           | kJ/m <sup>2</sup> | ISO 179/1eU     |
| Charpy notched impact strength (+23°C)       | 10           | kJ/m <sup>2</sup> | ISO 179/1eA     |
| Charpy notched impact strength (-30°C)       | 10           | kJ/m <sup>2</sup> | ISO 179/1eA     |
| <b>THERMAL PROPERTIES</b>                    |              |                   |                 |
|  | <b>VALUE</b> |                   |                 |
| Melting temperature (10°C/min)               | 225          | °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) | 0.35         | E-4/°C            | ISO 11359-1/-2  |
| Coeff. of linear therm. expansion (normal)   | 0.7          | E-4/°C            | ISO 11359-1/-2  |
| Burning Behav. at 0.75 mm nom. thickn.       | V-2          | class             | IEC 60695-11-10 |
| Thickness tested                             | 0.75         | mm                | IEC 60695-11-10 |
| Burning Behav. at 1.5 mm nom. thickn.        | V-0          | class             | IEC 60695-11-10 |
| Thickness tested                             | 1.5          | mm                | IEC 60695-11-10 |
| Burning Behav. at 3.0 mm nom. thickn.        | V-0          | class             | IEC 60695-11-10 |
| Thickness tested                             | 3            | mm                | IEC 60695-11-10 |
| Glow Wire Flammability Index GWFI            | 960          | °C                | IEC 60695-2-12  |
| GWFI (Thickness (1) tested)                  | 0.75         | mm                | IEC 60695-2-12  |
| Glow Wire Flammability Index GWFI            | 960          | °C                | IEC 60695-2-12  |

## Property Data

# Arnite® TV4 260 SN

| <i>PROPERTIES</i>                   | <i>TYPICAL DATA</i> | <i>UNIT</i> | <i>TEST METHOD</i> |
|-------------------------------------|---------------------|-------------|--------------------|
| GWFI (Thickness (2) tested)         | 1.5                 | mm          | IEC 60695-2-12     |
| <b><i>ELECTRICAL PROPERTIES</i></b> |                     |             |                    |
|                                     | <i>VALUE</i>        |             |                    |
| Relative permittivity (100Hz)       | 3.4                 | –           | IEC 62631-2-1      |
| Relative permittivity (1 MHz)       | 3.4                 | –           | IEC 62631-2-1      |
| Dissipation factor (100 Hz)         | 10                  | E-4         | IEC 62631-2-1      |
| Dissipation factor (1 MHz)          | 150                 | E-4         | IEC 62631-2-1      |
| Volume resistivity                  | >1E13               | Ohm*m       | IEC 62631-3-1      |
| Comparative tracking index          | 275                 | V           | IEC 60112          |
| Comparative tracking index (PLC)    | 2                   | class       | UL 746A            |
| <b><i>OTHER PROPERTIES</i></b>      |                     |             |                    |
|                                     | <i>VALUE</i>        |             |                    |
| Water absorption                    | 0.6                 | %           | Sim. to ISO 62     |
| Humidity absorption                 | 0.2                 | %           | Sim. to ISO 62     |
| Density                             | 1670                | kg/m³       | ISO 1183           |