

## DSM Arnite® TV4 460 KL PBT/PET Blend-30% Glass Reinforced (European Grade)

Category : Polymer , Thermoplastic , Polyester, TP , Polybutylene Terephthalate (PBT) , PBT + PET Blend, Glass Filled , Polyethylene Terephthalate (PET)

### Material Notes:

Arnite resins are engineered to provide specific performance in applications where DSM technology can offer value. Arnite Molding resins: Standard Unfilled and Reinforced materials High modulus Flame retardant grades Easy molding FR grades for connectors Toughened unfilled materials for durability High modulus, tight specification for critical auto components Toughened reinforced resins Low outgassing grades for reflector surfaces Arnite extrusion resins: Specialized materials for specific uses PET for medical applications Loose buffer Optical fiber tubing PET for stock shapes Applications Automotive: Connectors, sensors and E&E parts, Exterior fittings, Gear housings and motors, Brake valve bodies Electrical & Electronic: Telecoms and IT connectors, Bobbins, Low voltage Power distribution, E-motor components, Lightings and Lamp fittings Consumer Durables: Small Appliances Other: Optical fiber tubing Information provided by DSM.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_DSM-Arnite-TV4-460-KL-PBTPET-Blend-30-Glass-Reinforced-European-Grade.php](http://www.lookpolymers.com/polymer_DSM-Arnite-TV4-460-KL-PBTPET-Blend-30-Glass-Reinforced-European-Grade.php)

| Physical Properties                | Metric    | English                   | Comments                            |
|------------------------------------|-----------|---------------------------|-------------------------------------|
| Density                            | 1.55 g/cc | 0.0560 lb/in <sup>3</sup> | ISO 1183                            |
| Water Absorption                   | 0.35 %    | 0.35 %                    | Sim. to ISO 62                      |
| Moisture Absorption at Equilibrium | 0.15 %    | 0.15 %                    | Humidity Absorption; Sim. to ISO 62 |

| Mechanical Properties     | Metric                 | English                    | Comments     |
|---------------------------|------------------------|----------------------------|--------------|
| Tensile Strength at Break | 145 MPa                | 21000 psi                  | ISO 527-1/-2 |
| Elongation at Break       | 2.0 %                  | 2.0 %                      | ISO 527-1/-2 |
| Tensile Modulus           | 10.5 GPa               | 1520 ksi                   | ISO 527-1/-2 |
| Charpy Impact Unnotched   | 5.00 J/cm <sup>2</sup> | 23.8 ft-lb/in <sup>2</sup> | ISO 179/1eU  |
|                           | @Temperature -30.0 °C  | @Temperature -22.0 °F      |              |
|                           | 5.00 J/cm <sup>2</sup> | 23.8 ft-lb/in <sup>2</sup> | ISO 179/1eU  |
|                           | @Temperature 23.0 °C   | @Temperature 73.4 °F       |              |
| Charpy Impact, Notched    | 1.10 J/cm <sup>2</sup> | 5.24 ft-lb/in <sup>2</sup> | ISO 179/1eA  |
|                           | @Temperature -30.0 °C  | @Temperature -22.0 °F      |              |
|                           | 1.10 J/cm <sup>2</sup> | 5.24 ft-lb/in <sup>2</sup> | ISO 179/1eA  |
|                           | @Temperature 23.0 °C   | @Temperature 73.4 °F       |              |

| Thermal Properties | Metric | English | Comments |
|--------------------|--------|---------|----------|
|--------------------|--------|---------|----------|

| Thermal Properties                          | 20.0 µm/m-°C<br>Metric | 11.1 µin/in-°F<br>English | Comments 1/-2   |
|---------------------------------------------|------------------------|---------------------------|-----------------|
|                                             | @Temperature 20.0 °C   | @Temperature 68.0 °F      |                 |
| CTE, linear, Transverse to Flow             | 90.0 µm/m-°C           | 50.0 µin/in-°F            | ISO 11359-1/-2  |
|                                             | @Temperature 20.0 °C   | @Temperature 68.0 °F      |                 |
| Deflection Temperature at 0.46 MPa (66 psi) | 220 °C                 | 428 °F                    | ISO 75-1/-2     |
| Deflection Temperature at 1.8 MPa (264 psi) | 205 °C                 | 401 °F                    | ISO 75-1/-2     |
| Flammability, UL94                          | HB                     | HB                        | IEC 60695-11-10 |
|                                             | @Thickness 1.60 mm     | @Thickness 0.0630 in      |                 |

| Electrical Properties      | Metric             | English            | Comments    |
|----------------------------|--------------------|--------------------|-------------|
| Volume Resistivity         | >= 1.00e+15 ohm-cm | >= 1.00e+15 ohm-cm | IEC 60093   |
| Surface Resistance         | >= 1.00e+15 ohm    | >= 1.00e+15 ohm    | IEC 60093   |
| Dielectric Constant        | 3.9                | 3.9                | IEC 60250   |
|                            | @Frequency 1e+6 Hz | @Frequency 1e+6 Hz |             |
|                            | 4.1                | 4.1                | IEC 60250   |
|                            | @Frequency 100 Hz  | @Frequency 100 Hz  |             |
| Dielectric Strength        | 26.0 kV/mm         | 660 kV/in          | IEC 60243-1 |
| Dissipation Factor         | 0.0020             | 0.0020             | IEC 60250   |
|                            | @Frequency 100 Hz  | @Frequency 100 Hz  |             |
|                            | 0.018              | 0.018              | IEC 60250   |
|                            | @Frequency 1e+6 Hz | @Frequency 1e+6 Hz |             |
| Comparative Tracking Index | 250 V              | 250 V              | IEC 60112   |

| Descriptive Properties               | Value | Comments |
|--------------------------------------|-------|----------|
| Heat stabilized or stable to heat    | Yes   |          |
| Injection molding                    | Yes   |          |
| Light stabilized or stable to light  | Yes   |          |
| Release Agent                        | Yes   |          |
| U.V. stabilized or stable to weather | Yes   |          |
| With Fillers                         | Yes   |          |

## Contact Songhan Plastic Technology Co.,Ltd.

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