

Akulon® K224-TG9 PA6-GF45

45% Glass Reinforced

Print Date: 2024-03-27

| PROPERTIES | TYPICAL DATA | UNIT | TEST METHOD |
|--|--------------|--------|-----------------|
| RHEOLOGICAL PROPERTIES | DRY / COND | | |
| Molding shrinkage (parallel) | 0.15 / * | % | ISO 294-4 |
| Molding shrinkage (normal) | 0.95 / * | % | ISO 294–4 |
| | | | |
| MECHANICAL PROPERTIES | DRY / COND | | |
| Tensile modulus | 14500 / 9100 | MPa | ISO 527-1/-2 |
| Stress at break | 223 / 145 | MPa | ISO 527-1/-2 |
| Strain at break | 4/6 | % | ISO 527-1/-2 |
| Tensile modulus (200°C) | 4400 | MPa | ISO 527-1/-2 |
| Stress at break (200°C) | 49 | MPa | ISO 527-1/-2 |
| Strain at break (200°C) | 8 | % | ISO 527-1/-2 |
| Charpy impact strength (+23°C) | 100 / 115 | kJ/m² | ISO 179/1eU |
| Charpy impact strength (-30°C) | 95 / 95 | kJ/m² | ISO 179/1eU |
| Charpy notched impact strength (+23°C) | 20 / 35 | kJ/m² | ISO 179/1eA |
| Charpy notched impact strength (-30°C) | 13 / 13 | kJ/m² | ISO 179/1eA |
| | | | |
| THERMAL PROPERTIES | 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) | 0.2 / * | 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 | 1.5 / * | mm | IEC 60695-11-10 |

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Property Data

Akulon® K224-TG9

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| PROPERTIES | TYPICAL DATA | UNIT | TEST METHOD |
|--|-----------------|-------|-----------------|
| Burning Behav. at 3.0 mm nom. thickn. | HB / * | class | IEC 60695-11-10 |
| Thickness tested | 3/* | mm | IEC 60695-11-10 |
| Burning Behav. at 0.75 mm nom. thickn. | HB / * | class | IEC 60695-11-10 |
| Thickness tested | 0.75 / * | mm | IEC 60695-11-10 |
| ELECTRICAL PROPERTIES | DRY / COND | | |
| Relative permittivity (100Hz) | 3.5 / 14 | _ | IEC 62631-2-1 |
| Relative permittivity (1 MHz) | 5.2 / 4.5 | _ | IEC 62631-2-1 |
| Dissipation factor (100 Hz) | 50 / 3000 | E-4 | IEC 62631-2-1 |
| Dissipation factor (1 MHz) | 150 / 1200 | E-4 | IEC 62631-2-1 |
| Volume resistivity | 1E13 / 1E11 | Ohm*m | IEC 62631-3-1 |
| Surface resistivity | - / 1E14 | Ohm | IEC 62631-3-2 |
| Electric strength | 25 / 20 | kV/mm | IEC 60243-1 |
| Comparative tracking index | 600 / 600 | V | IEC 60112 |
| | | | |
| OTHER PROPERTIES | DRY / COND | | |
| Water absorption | 5 / * | % | Sim. to ISO 62 |
| Humidity absorption | 1.5 / * | % | Sim. to ISO 62 |
| Density | 1510 / - | kg/m³ | ISO 1183 |

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