

Akulon® K222–KGV4

PA6-GF20 FR(30)

20% Glass Fiber Reinforced, Heat Stabilized, Flame Retardant (halogenphosphorous-free)

Print Date: 2025-06-12

| PROPERTIES | TYPICAL DATA | UNIT | TEST METHOD |
|---|--------------|-------|-----------------|
| RHEOLOGICAL PROPERTIES | DRY / COND | | |
| Molding shrinkage (parallel) | 0.6 / * | % | ISO 294-4 |
| Molding shrinkage (normal) | 1/* | % | ISO 294-4 |
| | | | |
| MECHANICAL PROPERTIES | DRY / COND | | |
| Tensile modulus | 6000 / 2500 | MPa | ISO 527-1/-2 |
| Stress at break | 85 / 45 | MPa | ISO 527-1/-2 |
| Strain at break | 3.6 / 15 | % | ISO 527-1/-2 |
| Flexural modulus | 5700 / 2500 | MPa | ISO 178 |
| Flexural strength | 140 / 65 | MPa | ISO 178 |
| Charpy impact strength (+23°C) | 45 / 110 | kJ/m² | ISO 179/1eU |
| Charpy impact strength (-30°C) | 35 / 35 | kJ/m² | ISO 179/1eU |
| Charpy notched impact strength (+23°C) | 3.5 / 7 | kJ/m² | ISO 179/1eA |
| Charpy notched impact strength (-30°C) | 3/3 | 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) | 140 / * | °C | ISO 75-1/-2 |
| Temp. of deflection under load (0.45 MPa) | 210 / * | °C | ISO 75-1/-2 |
| Burning Behav. at 1.5 mm nom. thickn. | V-2 / * | class | IEC 60695-11-10 |
| Thickness tested | 1.5 / * | mm | IEC 60695-11-10 |
| Burning Behav. at 3.0 mm nom. thickn. | V-2 / * | class | IEC 60695-11-10 |
| Thickness tested | 3/* | mm | IEC 60695-11-10 |
| Burning Behav. at 0.75 mm nom. thickn. | V-2 / * | class | IEC 60695-11-10 |

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Property Data

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|-----------------------------------|-----------------|-------|-----------------|
| Thickness tested | 0.75 / * | mm | IEC 60695-11-10 |
| Glow Wire Flammability Index GWFI | 960 / – | °C | IEC 60695-2-12 |
| GWFI (Thickness (1) tested) | 1.6 / - | mm | IEC 60695-2-12 |
| Glow Wire Flammability Index GWFI | 960 / - | °C | IEC 60695-2-12 |
| GWFI (Thickness (2) tested) | 1/- | mm | IEC 60695-2-12 |
| | | | |
| ELECTRICAL PROPERTIES | DRY / COND | | |
| Relative permittivity (100Hz) | 4.3 / 10 | _ | IEC 62631-2-1 |
| Relative permittivity (1 MHz) | 3.8 / 3.9 | _ | IEC 62631-2-1 |
| Dissipation factor (100 Hz) | 130 / 3000 | E-4 | IEC 62631-2-1 |
| Dissipation factor (1 MHz) | 210 / 1000 | 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 | 30 / 25 | kV/mm | IEC 60243-1 |
| Comparative tracking index | 575 / * | V | IEC 60112 |
| | | | |
| OTHER PROPERTIES | DRY / COND | | |
| Water absorption | 6.5 / * | % | Sim. to ISO 62 |
| Humidity absorption | 2/* | % | Sim. to ISO 62 |
| Density | 1340 / – | kg/m³ | ISO 1183 |

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