

Akulon® K222-D

PA6

Low Viscosity

Print Date: 2016-04-01

| Properties | Typical Data | Unit | Test Method |
|--|-------------------|-------------------|-----------------|
| Mechanical properties | | | |
| | <i>dry / cond</i> | | |
| Tensile modulus | 3800/1200 | MPa | ISO 527-1/-2 |
| Yield stress | 95/55 | MPa | ISO 527-1/-2 |
| Yield strain | 3.5/25 | % | ISO 527-1/-2 |
| Nominal strain at break | 15/>50 | % | ISO 527-1/-2 |
| Flexural modulus | 2600/- | MPa | ISO 178 |
| Flexural strength | 100/- | MPa | ISO 178 |
| Charpy impact strength (+23 °C) | N/N | kJ/m ² | ISO 179/1eU |
| Charpy impact strength (-30 °C) | N/N | kJ/m ² | ISO 179/1eU |
| Charpy notched impact strength (+23 °C) | 8/35 | kJ/m ² | ISO 179/1eA |
| Charpy notched impact strength (-30 °C) | 4/4 | kJ/m ² | ISO 179/1eA |
| Thermal properties | | | |
| | <i>dry / cond</i> | | |
| Melting temperature (10 °C/min) | 220/* | °C | ISO 11357-1/-3 |
| Temp. of deflection under load (1.80 MPa) | 60/* | °C | ISO 75-1/-2 |
| Temp. of deflection under load (0.45 MPa) | 150/* | °C | ISO 75-1/-2 |
| Coeff. of linear therm. expansion (parallel) | 0.9/* | E-4/°C | ISO 11359-1/-2 |
| Coeff. of linear therm. expansion (normal) | 0.9/* | E-4/°C | ISO 11359-1/-2 |
| Burning Beh. at 1.5 mm nom. thickn. | V-2/* | class | IEC 60695-11-10 |
| Thickness tested | 1.5/* | mm | IEC 60695-11-10 |
| Burning Beh. at thickness h | V-2/* | class | IEC 60695-11-10 |
| Thickness tested | 3/* | mm | IEC 60695-11-10 |

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| Properties | Typical Data | Unit | Test Method |
|-------------------------------|--------------|-------------------|----------------|
| Oxygen index | 26/* | % | ISO 4589-1/-2 |
| Electrical properties | | | |
| | dry / cond | | |
| Relative permittivity (100Hz) | 3.2/14 | - | IEC 60250 |
| Relative permittivity (1 MHz) | 3/4.5 | - | IEC 60250 |
| Dissipation factor (100 Hz) | 50/3000 | E-4 | IEC 60250 |
| Dissipation factor (1 MHz) | 150/1200 | E-4 | IEC 60250 |
| Volume resistivity | 1E13/1E10 | Ohm*m | IEC 60093 |
| Surface resistivity | */1E14 | Ohm | IEC 60093 |
| Electric strength | 25/20 | kV/mm | IEC 60243-1 |
| Comparative tracking index | */600 | - | IEC 60112 |
| Other properties | | | |
| | dry / cond | | |
| Water absorption | 9/* | % | Sim. to ISO 62 |
| Humidity absorption | 2.5/* | % | Sim. to ISO 62 |
| Density | 1130/- | kg/m ³ | ISO 1183 |

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