

# Akulon<sup>®</sup> K224–G6–FC NA99001

## PA6–GF30

30% Glass Reinforced, Food Contact Quality

Food contact declaration can be issued on request

| PROPERTIES                                   | TYPICAL DATA      | UNIT              | TEST METHOD     |
|----------------------------------------------|-------------------|-------------------|-----------------|
| <b>RHEOLOGICAL PROPERTIES</b>                |                   |                   |                 |
|                                              | <b>DRY / COND</b> |                   |                 |
| Molding shrinkage (parallel)                 | 0.3 / *           | %                 | ISO 294–4       |
| Molding shrinkage (normal)                   | 0.9 / *           | %                 | ISO 294–4       |
| <b>MECHANICAL PROPERTIES</b>                 |                   |                   |                 |
|                                              | <b>DRY / COND</b> |                   |                 |
| Tensile modulus                              | 9500 / 6000       | MPa               | ISO 527–1/–2    |
| Stress at break                              | 180 / 110         | MPa               | ISO 527–1/–2    |
| Strain at break                              | 3.5 / 7           | %                 | ISO 527–1/–2    |
| Flexural modulus                             | 8600 / –          | MPa               | ISO 178         |
| Flexural strength                            | 235 / –           | MPa               | ISO 178         |
| Charpy impact strength (+23°C)               | 90 / 110          | kJ/m <sup>2</sup> | ISO 179/1eU     |
| Charpy impact strength (–30°C)               | 75 / 75           | kJ/m <sup>2</sup> | ISO 179/1eU     |
| Charpy notched impact strength (+23°C)       | 12 / 25           | kJ/m <sup>2</sup> | ISO 179/1eA     |
| Charpy notched impact strength (–30°C)       | 11 / 11           | kJ/m <sup>2</sup> | ISO 179/1eA     |
| <b>THERMAL PROPERTIES</b>                    |                   |                   |                 |
|                                              | <b>DRY / COND</b> |                   |                 |
| Melting temperature (10°C/min)               | 220 / *           | °C                | ISO 11357–1/–3  |
| Temp. of deflection under load (1.80 MPa)    | 200 / *           | °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)   | 0.7 / *           | 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 |

Property Data

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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 / 20    | –     | IEC 62631–2–1 |
| Relative permittivity (1 MHz) | 3.3 / 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             | 30 / 25     | kV/mm | IEC 60243–1   |
| Comparative tracking index    | – / 600     | V     | IEC 60112     |

| OTHER PROPERTIES    | DRY / COND |       |                |
|---------------------|------------|-------|----------------|
| Water absorption    | 6.3 / *    | %     | Sim. to ISO 62 |
| Humidity absorption | 1.9 / *    | %     | Sim. to ISO 62 |
| Density             | 1350 / –   | kg/m³ | ISO 1183       |