

# Pocan<sup>®</sup> KU1–7313

**(PBT+PET)–GF15**

15% Glass Reinforced, Injection Molding, Excellent Surface Properties

| PROPERTIES                                   | TYPICAL DATA | UNIT                   | TEST METHOD     |
|----------------------------------------------|--------------|------------------------|-----------------|
| <b>RHEOLOGICAL PROPERTIES</b>                |              |                        |                 |
|                                              | VALUE        |                        |                 |
| Melt volume–flow rate                        | 18           | cm <sup>3</sup> /10min | ISO 1133        |
| Temperature                                  | 260          | °C                     | ISO 1133        |
| Load                                         | 2.16         | kg                     | ISO 1133        |
| Molding shrinkage (normal)                   | 1            | %                      | ISO 294–4       |
| Molding shrinkage (parallel)                 | 0.5          | %                      | ISO 294–4       |
| <b>MECHANICAL PROPERTIES</b>                 |              |                        |                 |
|                                              | VALUE        |                        |                 |
| Tensile modulus                              | 6100         | MPa                    | ISO 527–1/–2    |
| Stress at break                              | 110          | MPa                    | ISO 527–1/–2    |
| Strain at break                              | 3.2          | %                      | ISO 527–1/–2    |
| Flexural strain at flexural strength         | 3.8          | %                      | ISO 178–A       |
| Charpy impact strength (+23°C)               | 30           | kJ/m <sup>2</sup>      | ISO 179/1eU     |
| Charpy impact strength (–30°C)               | 30           | kJ/m <sup>2</sup>      | ISO 179/1eU     |
| Izod impact strength (–30°C)                 | 25           | kJ/m <sup>2</sup>      | ISO 180–1U      |
| <b>THERMAL PROPERTIES</b>                    |              |                        |                 |
|                                              | VALUE        |                        |                 |
| Temp. of deflection under load (1.80 MPa)    | 185          | °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) | 0.5          | E–4/°C                 | ISO 11359–1/–2  |
| Coeff. of linear therm. expansion (normal)   | 1.1          | E–4/°C                 | ISO 11359–1/–2  |
| Burning Behav. at 0.75 mm nom. thickn.       | HB           | class                  | IEC 60695–11–10 |
| Thickness tested                             | 0.75         | mm                     | IEC 60695–11–10 |
| Burning Behav. at 1.5 mm nom. thickn.        | HB           | class                  | IEC 60695–11–10 |

Property Data

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| PROPERTIES                            | TYPICAL DATA | UNIT  | TEST METHOD     |
|---------------------------------------|--------------|-------|-----------------|
| Thickness tested                      | 1.5          | mm    | IEC 60695–11–10 |
| Burning Behav. at 3.0 mm nom. thickn. | HB           | class | IEC 60695–11–10 |
| Thickness tested                      | 3            | mm    | IEC 60695–11–10 |
| Oxygen index                          | 22           | %     | ISO 4589–1/–2   |
| Glow Wire Flammability Index GWFI     | 750          | °C    | IEC 60695–2–12  |
| GWFI (Thickness (1) tested)           | 2            | mm    | IEC 60695–2–12  |

| ELECTRICAL PROPERTIES         | VALUE |       |               |
|-------------------------------|-------|-------|---------------|
| Relative permittivity (100Hz) | 3.6   | –     | IEC 62631–2–1 |
| Relative permittivity (1 MHz) | 3.5   | –     | IEC 62631–2–1 |
| Dissipation factor (100 Hz)   | 20    | E–4   | IEC 62631–2–1 |
| Dissipation factor (1 MHz)    | 170   | E–4   | IEC 62631–2–1 |
| Volume resistivity            | >1E13 | Ohm*m | IEC 62631–3–1 |
| Surface resistivity           | >1E15 | Ohm   | IEC 62631–3–2 |
| Electric strength             | 24    | kV/mm | IEC 60243–1   |
| Comparative tracking index    | 225   | V     | IEC 60112     |

| OTHER PROPERTIES    | VALUE |       |                |
|---------------------|-------|-------|----------------|
| Water absorption    | 0.4   | %     | Sim. to ISO 62 |
| Humidity absorption | 0.2   | %     | Sim. to ISO 62 |
| Density             | 1430  | kg/m³ | ISO 1183       |

| PROCESSING RECOMMENDATIONS               | VALUE     |    |                      |
|------------------------------------------|-----------|----|----------------------|
| Drying temperature circulating air dryer | 120       | °C |                      |
| Drying time circulating air dryer        | 4–8       | h  |                      |
| Residual moisture content                | 0.00–0.02 | %  | acc. to Karl Fischer |
| Melt temperature (Tmin – Tmax)           | 260–280   | °C |                      |
| Mold temperature                         | 80–100    | °C |                      |

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Viscosity–shear rate

