

PA6, excellent strength, stiffness, high temperature resistance, dimensional stability, heat stabilized and hydrolysis resistance.

| Properties                                     | Typical Value | Units             | Test Method    |
|------------------------------------------------|---------------|-------------------|----------------|
| <b>Mechanical Properties</b>                   |               | dry / cond.       |                |
| Tensile Modulus, 1 mm/min                      | 11000 / 7000  | MPa               | ISO 527-1/-2   |
| Tensile Stress at Break, 50 mm/min             | 190 / 130     | MPa               | ISO 527-1/-2   |
| Tensile Strain at Break, 50 mm/min             | 3 / 5         | %                 | ISO 527-1/-2   |
| Flexural Modulus, 2 mm/min                     | 10000 / 7000  | MPa               | ISO 178        |
| Flexural Strength, 2 mm/min                    | 300 / 170     | MPa               | ISO 178        |
| Charpy Notched Impact Strength, +23°C          | 15 / 24       | KJ/m <sup>2</sup> | ISO 179/1eA    |
| Charpy Notched Impact Strength, -30°C          | 12 / 12       | KJ/m <sup>2</sup> | ISO 179/1eA    |
| <b>Thermal Properties</b>                      |               |                   |                |
| Melting Temperature, 10°C/min                  | 220           | °C                | ISO 11357-1/-3 |
| Temperature of Deflection Under Load, 1.8 MPa  | 200           | °C                | ISO 75-1/-2    |
| Temperature of Deflection Under Load, 0.45 MPa | 220           | °C                | ISO 75-1/-2    |
| Flame Resistant, 1.5 mm                        | HB            | Class             | UL 94          |
| <b>Electrical Properties</b>                   |               | dry / cond.       |                |
| Relative Permittivity, 1 MHz                   | 4 / 6         | -                 | IEC 62631-2-1  |
| Volume Resistivity                             | 1E13 / 1E10   | Ohm.m             | IEC 62631-3-1  |
| Surface Resistivity                            | 1E13 / 1E10   | Ohm               | IEC 62631-3-2  |
| <b>Physical Properties</b>                     |               |                   |                |
| Density                                        | 1.46          | g/cm <sup>3</sup> | ISO 1183       |
| Molding Shrinkage, 2.0 mm, Parallel / Normal   | 0.3 / 0.8     | %                 | ISO 294-4      |
| Humidity Absorption, 23°C / 50% RH             | 1.7           | %                 | Sim. to ISO 62 |
| <b>Injection Molding</b>                       |               |                   |                |
| Drying Temperature                             | 80            | °C                | 4 hours        |
| Melt Temperature                               | 250 - 280     | °C                | -              |
| Mould Temperature                              | 70 - 100      | °C                | -              |

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Sogun<sup>®</sup> provided information about the product, whether data, recommendations or other information, is researched and trustworthy. Since there are many influencing factors in the production process, users are advised to conduct their own tests before production. The standard values are for reference only and should not be regarded as binding specifications.

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