

**Product Texts**

ISO 16396 - PA12, GF30, M1GHLR, 16-070

**Rilsamid® AZM 30 BLACK T6LD resin** is a fiberglass reinforced polyamide.

This black colored grade is designed for injection molding.

**Packaging :**

This grade is delivered dried in sealed packaging (25 kg bags / 450 kg rigid containers) ready to be processed

**Shelf life :**

Two years from the delivery.

For any use above this limit please refer to our technical services.

| <b>Processing/Physical Characteristics</b> | <b>dry / cond</b> | <b>Unit</b>            | <b>Test Standard</b> |
|--|-------------------|------------------------|----------------------|
| <b>ISO Data</b>                            |                   |                        |                      |
| <sup>[C]</sup> Melt volume-flow rate, MVR  | <b>7 / *</b>      | cm <sup>3</sup> /10min | ISO 1133             |
| Temperature                                | <b>235 / *</b>    | °C                     | -                    |
| Load                                       | <b>5 / *</b>      | kg                     | -                    |
| <sup>[C]</sup> Molding shrinkage, parallel | <b>0.2 / *</b>    | %                      | ISO 294-4, 2577      |
| <sup>[C]</sup> Molding shrinkage, normal   | <b>0.6 / *</b>    | %                      | ISO 294-4, 2577      |

[C]: CAMPUS

| <b>Mechanical properties</b>                         | <b>dry / cond</b>  | <b>Unit</b>       | <b>Test Standard</b> |
|--|--------------------|-------------------|----------------------|
| <b>ISO Data</b>                                      |                    |                   |                      |
| <sup>[C]</sup> Tensile Modulus                       | <b>6900 / 6400</b> | MPa               | ISO 527              |
| <sup>[C]</sup> Stress at break                       | <b>112 / 100</b>   | MPa               | ISO 527              |
| <sup>[C]</sup> Strain at break                       | <b>5 / 4</b>       | %                 | ISO 527              |
| <sup>[C]</sup> Charpy impact strength, +23°C         | <b>79 / 77</b>     | kJ/m <sup>2</sup> | ISO 179/1eU          |
| <sup>[C]</sup> Charpy impact strength, -30°C         | <b>83 / 83</b>     | kJ/m <sup>2</sup> | ISO 179/1eU          |
| <sup>[C]</sup> Charpy notched impact strength, +23°C | <b>19 / 19</b>     | kJ/m <sup>2</sup> | ISO 179/1eA          |
| <sup>[C]</sup> Charpy notched impact strength, -30°C | <b>12 / 12</b>     | kJ/m <sup>2</sup> | ISO 179/1eA          |

[C]: CAMPUS

| <b>Thermal properties</b>                                  | <b>dry / cond</b> | <b>Unit</b> | <b>Test Standard</b> |
|--|-------------------|-------------|----------------------|
| <b>ISO Data</b>  |                   |             |                      |
| <sup>[C]</sup> Melting temperature, 10°C/min               | <b>183 / *</b>    | °C          | ISO 11357-1/-3       |
| <sup>[C]</sup> Temp. of deflection under load, 1.80 MPa    | <b>163 / *</b>    | °C          | ISO 75-1/-2          |
| <sup>[C]</sup> Temp. of deflection under load, 0.45 MPa    | <b>176 / *</b>    | °C          | ISO 75-1/-2          |
| <sup>[C]</sup> Vicat softening temperature, B              | <b>165 / *</b>    | °C          | ISO 306              |
| <sup>[C]</sup> Coeff. of linear therm. expansion, parallel | <b>50 / *</b>     | E-6/K       | ISO 11359-1/-2       |
| <sup>[C]</sup> Burning Behav. at thickness h               | <b>HB / *</b>     | class       | IEC 60695-11-10      |
| Thickness tested   | <b>3.0 / *</b>    | mm          | -                    |
| Yellow Card available                                      | <b>yes / *</b>    | -           | -                    |

[C]: CAMPUS

| Electrical properties                       | dry / cond | Unit  | Test Standard |
|---|------------|-------|---------------|
| <b>ISO Data</b>                             |            |       |               |
| <sup>[C]</sup> Relative permittivity, 100Hz | 4 / -      | -     | IEC 62631-2-1 |
| <sup>[C]</sup> Relative permittivity, 1MHz  | 3 / -      | -     | IEC 62631-2-1 |
| <sup>[C]</sup> Dissipation factor, 100Hz    | 664 / -    | E-4   | IEC 62631-2-1 |
| <sup>[C]</sup> Dissipation factor, 1MHz     | 274 / -    | E-4   | IEC 62631-2-1 |
| <sup>[C]</sup> Volume resistivity           | - / 1E11   | Ohm*m | IEC 62631-3-1 |
| <sup>[C]</sup> Surface resistivity          | * / 1E14   | Ohm   | IEC 62631-3-2 |
| <sup>[C]</sup> Electric strength            | 35 / 35    | kV/mm | IEC 60243-1   |
| <sup>[C]</sup> Comparative tracking index   | * / 600    | -     | IEC 60112     |

[C]: CAMPUS

| Other properties                   | dry / cond  | Unit              | Test Standard  |
|------------------------------------|-------------|-------------------|----------------|
| <sup>[C]</sup> Water absorption    | 1.3 / *     | %                 | Sim. to ISO 62 |
| <sup>[C]</sup> Humidity absorption | 0.5 / *     | %                 | Sim. to ISO 62 |
| <sup>[C]</sup> Density             | 1240 / 1240 | kg/m <sup>3</sup> | ISO 1183       |

[C]: CAMPUS

## Characteristics

### Processing

Injection Molding

### Delivery form

Pellets, Black

### Additives

Release agent

### Special Characteristics

Light stabilized or stable to light, U.V. stabilized or stable to weather, Heat stabilized or stable to heat

### Regional Availability

North America, Europe, Asia Pacific, South and Central America, Near East/Africa

## Other text information

### Injection molding

#### Processing conditions:

- Typical melt temperature (Min / Recommended / Max) : 250°C / 265°C / 280°C.
- Typical mold temperature : 40 – 90°C.
- Drying time and temperature (only necessary for bags opened for more than two hours) : 4-8 hours at 80-90°C.