

**Product Texts**

Product-nomenclature: ISO 16396-PA66 PA6,GF30FR40,M1F2HR,C14-110N

**Product Attributes**

Flame retardant, Improved UV resistance (outdoor use)

**Markets**

**Automotive**

Automotive electr. and electronics, lighting

**Electricals & Electronics**

Electrical appliances, Electrical equipment, Cables & Tubes, Connectors, Energy distribution, Lighting

**Industry & Consumer goods**

Mechanical Engineering

**Approvals**

**Burning Behaviour**

UL 5VA, UL V0, VDE

| Processing/Physical Characteristics        | dry / cond     | Unit              | Test Standard   |
|--|----------------|-------------------|-----------------|
| <b>ISO Data</b>                            |                |                   |                 |
| <sup>[C]</sup> Molding shrinkage, parallel | <b>0.2 / *</b> | %                 | ISO 294-4, 2577 |
| <sup>[C]</sup> Molding shrinkage, normal   | <b>0.7 / *</b> | %                 | ISO 294-4, 2577 |
| <sup>[C]</sup> Eff. thermal diffusivity    | <b>9.85E-8</b> | m <sup>2</sup> /s | -               |

[C]: CAMPUS

| Mechanical properties                                | dry / cond          | Unit              | Test Standard |
|--|---------------------|-------------------|---------------|
| <b>ISO Data</b>                                      |                     |                   |               |
| <sup>[C]</sup> Tensile Modulus                       | <b>10500 / 6500</b> | MPa               | ISO 527       |
| <sup>[C]</sup> Stress at break                       | <b>150 / 90</b>     | MPa               | ISO 527       |
| <sup>[C]</sup> Strain at break                       | <b>2.5 / 4.5</b>    | %                 | ISO 527       |
| <sup>[C]</sup> Charpy impact strength, +23°C         | <b>65 / 70</b>      | kJ/m <sup>2</sup> | ISO 179/1eU   |
| <sup>[C]</sup> Charpy impact strength, -30°C         | <b>60 / 60</b>      | kJ/m <sup>2</sup> | ISO 179/1eU   |
| <sup>[C]</sup> Charpy notched impact strength, +23°C | <b>9.5 / 14</b>     | kJ/m <sup>2</sup> | ISO 179/1eA   |
| <sup>[C]</sup> Charpy notched impact strength, -30°C | <b>9 / 8.5</b>      | kJ/m <sup>2</sup> | ISO 179/1eA   |

[C]: CAMPUS

| Thermal properties                                      | dry / cond     | Unit  | Test Standard   |
|---|----------------|-------|-----------------|
| <b>ISO Data</b>   |                |       |                 |
| <sup>[C]</sup> Melting temperature, 10°C/min            | <b>260 / *</b> | °C    | ISO 11357-1/-3  |
| <sup>[C]</sup> Temp. of deflection under load, 1.80 MPa | <b>235 / *</b> | °C    | ISO 75-1/-2     |
| <sup>[C]</sup> Temp. of deflection under load, 8.00 MPa | <b>165 / *</b> | °C    | ISO 75-1/-2     |
| <sup>[C]</sup> Burning Behav. at thickness h            | <b>V-0 / *</b> | class | IEC 60695-11-10 |
| Thickness tested  | <b>0.8 / *</b> | mm    | -               |

[C]: CAMPUS

| Electrical properties                     | dry / cond         | Unit  | Test Standard |
|---|--------------------|-------|---------------|
| <b>ISO Data</b>                           |                    |       |               |
| <sup>[C]</sup> Volume resistivity         | <b>1E10 / 1E10</b> | Ohm*m | IEC 62631-3-1 |
| <sup>[C]</sup> Surface resistivity        | <b>* / 1E10</b>    | Ohm   | IEC 62631-3-2 |
| <sup>[C]</sup> Comparative tracking index | <b>- / 600</b>     | -     | IEC 60112     |

[C]: CAMPUS

| Other properties                   | dry / cond      | Unit              | Test Standard  |
|------------------------------------|-----------------|-------------------|----------------|
| <sup>[C]</sup> Water absorption    | <b>4 / *</b>    | %                 | Sim. to ISO 62 |
| <sup>[C]</sup> Humidity absorption | <b>1.5 / *</b>  | %                 | Sim. to ISO 62 |
| <sup>[C]</sup> Density             | <b>1440 / -</b> | kg/m <sup>3</sup> | ISO 1183       |

[C]: CAMPUS

**Characteristics**

**Processing**

Injection Molding

**Delivery form**

Granules, Natural Color

**Special Characteristics**

Flame retardant, U.V. stabilized or stable to weather

**Applications**

Automotive, Electrical and Electronical

**Regional Availability**

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