

Product Texts

PA66 flame retardant injection moulding grade, halogen and red phosphorus free. 35% glass fibre reinforced. Natural colour.

Suitable for parts requiring fire retardancy along with high stiffness and good mechanical resistance. Good electrical insulating properties. Rated V-0 according to UL-94.

| Processing/Physical Characteristics | dry / cond | Unit | Test Standard |
|--|----------------|------|-----------------|
| ISO Data | | | |
| ^[C] Molding shrinkage, parallel | 0.3 / * | % | ISO 294-4, 2577 |
| ^[C] Molding shrinkage, normal | 0.8 / * | % | ISO 294-4, 2577 |

[C]: CAMPUS

| Mechanical properties | dry / cond | Unit | Test Standard |
|--|----------------------|-------------------|---------------|
| ISO Data | | | |
| ^[C] Tensile Modulus | 11800 / 10100 | MPa | ISO 527 |
| ^[C] Stress at break | 145 / 110 | MPa | ISO 527 |
| ^[C] Strain at break | 2.3 / 2.5 | % | ISO 527 |
| ^[C] Charpy impact strength, +23°C | 70 / 75 | kJ/m ² | ISO 179/1eU |
| ^[C] Charpy impact strength, -30°C | 65 / - | kJ/m ² | ISO 179/1eU |
| ^[C] Charpy notched impact strength, +23°C | 10 / 14 | kJ/m ² | ISO 179/1eA |
| ^[C] Charpy notched impact strength, -30°C | 9 / - | kJ/m ² | ISO 179/1eA |

[C]: CAMPUS

| Thermal properties | dry / cond | Unit | Test Standard |
|---|----------------|-------|-----------------|
| ISO Data | | | |
| ^[C] Melting temperature, 10°C/min | 260 / * | °C | ISO 11357-1/-3 |
| ^[C] Temp. of deflection under load, 1.80 MPa | 245 / * | °C | ISO 75-1/-2 |
| ^[C] Temp. of deflection under load, 0.45 MPa | 260 / * | °C | ISO 75-1/-2 |
| ^[C] Vicat softening temperature, B | 250 / * | °C | ISO 306 |
| ^[C] Burning Behav. at thickness h | V-0 / * | class | IEC 60695-11-10 |
| Thickness tested | 0.8 / * | mm | - |
| Yellow Card available | yes / * | - | - |

[C]: CAMPUS

| Electrical properties | dry / cond | Unit | Test Standard |
|---|--------------------|-------|---------------|
| ISO Data | | | |
| ^[C] Volume resistivity | 1E13 / 1E11 | Ohm*m | IEC 62631-3-1 |
| ^[C] Surface resistivity | * / 1E10 | Ohm | IEC 62631-3-2 |
| ^[C] Comparative tracking index | 600 / - | - | IEC 60112 |

[C]: CAMPUS

| Other properties | dry / cond | Unit | Test Standard |
|------------------------------------|-----------------|-------------------|----------------|
| ^[C] Water absorption | 5.4 / * | % | Sim. to ISO 62 |
| ^[C] Humidity absorption | 1.3 / * | % | Sim. to ISO 62 |
| ^[C] Density | 1470 / - | kg/m ³ | ISO 1183 |

[C]: CAMPUS

| Processing Recommendation Injection Molding | Value | Unit | Test Standard |
|---|------------------|------|---------------|
| Pre-drying - Temperature | 80 | °C | - |
| Pre-drying - Time | 2 - 4 | h | - |
| Processing humidity | ≤0.1 | % | - |
| Melt temperature | 280 - 300 | °C | - |
| Mold temperature | 80 - 100 | °C | - |

Characteristics

Processing

Injection Molding

Delivery form

Granules, Natural Color

Additives

Release agent

Special Characteristics

Flame retardant, Halogen-free, Phosphorus-free, Heat stabilized or stable to heat

Applications

Electrical and Electronical

Regional Availability

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

Other text information**Injection molding**

The material is delivered in moisture-proof packaging ready for processing. Maximum recommended water content for best processing is 0.10%. Typical conditions with a desiccant drier: temperature 80 ° C, dew point -20 ° C or below, time 2-4 h or more. Avoid excessive shear rates and high thermal stresses for better processing. Special care must be taken to avoid moisture absorption and contamination with other polymers when adding regrind material. Colour variation and mechanical properties reduction may occur and should always be carefully monitored.

Injection Molding Processing ParametersMelt Temperature
280 - 300°CMold Temperature
80 - 100°CInjection Speed
medium-high