# ForTii® LDS51B

PPA-GF30 FR(40) Envalior

## Product Texts

30% Glass Reinforced, PA4T, Halogen free and free of red phosphorous, Certified V-0 at 0.4mm, Laser Direct Structuring (LDS)

ISO 1043 PPA-GF30 FR(40)

ForTii® LDS51B is a truly reflow compatible and halogen-free flame retardancy grade. LDS51B has superior plating performance and is compatible with a broad range of laser settings enabling high resolution and fine line capability.

| Processing/Physical Characteristics | dry / cond | Unit | Test Standard |
|---|---|---|---|
| **ISO Data** | | | |
| [C] Molding shrinkage, parallel | **0.3 / *** | % | ISO 294-4, 2577 |
| [C] Molding shrinkage, normal | **1.0 / *** | % | ISO 294-4, 2577 |

[C]: CAMPUS

| Mechanical properties | dry / cond | Unit | Test Standard |
|---|---|---|---|
| **ISO Data** | | | |
| [C] Tensile Modulus | **11500 / 11800** | MPa | ISO 527 |
| [C] Stress at break | **110 / 100** | MPa | ISO 527 |
| [C] Strain at break | **1.6 / 1.6** | % | ISO 527 |
| [C] Charpy impact strength, +23°C | **26 / 26** | kJ/m² | ISO 179/1eU |
| [C] Charpy notched impact strength, +23°C | **3 / 3** | kJ/m² | ISO 179/1eA |

[C]: CAMPUS

| Thermal properties | dry / cond | Unit | Test Standard |
|---|---|---|---|
| **ISO Data** | | | |
| [C] Melting temperature, 10°C/min | **325 / *** | °C | ISO 11357-1/-3 |
| [C] Glass transition temperature, 10°C/min | **125 / *** | °C | ISO 11357-1/-2 |
| [C] Temp. of deflection under load, 1.80 MPa | **290 / *** | °C | ISO 75-1/-2 |
| [C] Temp. of deflection under load, 0.45 MPa | **310 / *** | °C | ISO 75-1/-2 |

[C]: CAMPUS

| Electrical properties | dry / cond | Unit | Test Standard |
|---|---|---|---|
| **ISO Data** | | | |
| [C] Volume resistivity | **>1E13 / >1E13** | Ohm*m | IEC 62631-3-1 |
| [C] Surface resistivity | *** / >1E15** | Ohm | IEC 62631-3-2 |
| [C] Comparative tracking index | **400 / -** | - | IEC 60112 |

[C]: CAMPUS

| Other properties | dry / cond | Unit | Test Standard |
|---|---|---|---|
| [C] Water absorption | **3.3 / *** | % | Sim. to ISO 62 |
| [C] Humidity absorption | **1.3 / *** | % | Sim. to ISO 62 |
| [C] Density | **1580 / -** | kg/m³ | ISO 1183 |

[C]: CAMPUS

## Characteristics

**Processing**
Injection Molding

**Special Characteristics**
Flame retardant, Halogen-free, Phosphorus-free

**Delivery form**
Granules

**Regional Availability**
North America, Europe, Asia Pacific

## Other text information


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**Injection molding**

Injection Molding Recommendations
Hot runner recommendations for molding high heat performance Engineering Materials
Steel recommendations for molds screws and barrels
Trouble shooting guideline for injection molding


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