

Product Texts

Vicat 120°C, Black color only, Laser Direct Structuring (LDS) *

ISO 1043 (PC+ABS)

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*The compound is intended specifically for the use in the process of manufacturing conducting path designs according to the German application of the patent 101 32 092 of LPKF Laser & Electronics AG (Osteriede 7 30827 Garbsen Germany). Please address straight to LPKF Laser & Electronics AG (www.LPKF.de).

| Processing/Physical Characteristics | Value | Unit | Test Standard |
|--|-------|------------------------|-----------------|
| ISO Data | | | |
| ^[C] Melt volume-flow rate, MVR | 14 | cm ³ /10min | ISO 1133 |
| Temperature | 260 | °C | - |
| Load | 5 | kg | - |
| ^[C] Molding shrinkage, parallel | 0.5 | % | ISO 294-4, 2577 |

[C]: CAMPUS

| Mechanical properties | Value | Unit | Test Standard |
|--|-------|-------------------|---------------|
| ISO Data | | | |
| ^[C] Tensile Modulus | 2200 | MPa | ISO 527 |
| ^[C] Yield stress | 50 | MPa | ISO 527 |
| ^[C] Yield strain | 4 | % | ISO 527 |
| ^[C] Nominal strain at break | >50 | % | ISO 527 |
| ^[C] Charpy impact strength, +23°C | N | kJ/m ² | ISO 179/1eU |
| ^[C] Charpy impact strength, -30°C | N | kJ/m ² | ISO 179/1eU |
| ^[C] Charpy notched impact strength, +23°C | 70 | kJ/m ² | ISO 179/1eA |
| ^[C] Charpy notched impact strength, -30°C | 60 | kJ/m ² | ISO 179/1eA |
| ^[C] Puncture energy, +23°C | 35 | J | ISO 6603-2 |

[C]: CAMPUS

| Thermal properties | Value | Unit | Test Standard |
|--|-------|-------|----------------|
| ISO Data | | | |
| ^[C] Temp. of deflection under load, 1.80 MPa | 102 | °C | ISO 75-1/-2 |
| ^[C] Vicat softening temperature, B | 122 | °C | ISO 306 |
| ^[C] Coeff. of linear therm. expansion, parallel | 70 | E-6/K | ISO 11359-1/-2 |
| ^[C] Coeff. of linear therm. expansion, normal | 70 | E-6/K | ISO 11359-1/-2 |

[C]: CAMPUS

| Electrical properties | Value | Unit | Test Standard |
|------------------------------------|-------|-------|---------------|
| ISO Data | | | |
| ^[C] Volume resistivity | >1E13 | Ohm*m | IEC 62631-3-1 |
| ^[C] Surface resistivity | >1E15 | Ohm | IEC 62631-3-2 |

[C]: CAMPUS

| Other properties | Value | Unit | Test Standard |
|------------------------------------|-------|-------------------|----------------|
| ^[C] Water absorption | 0.6 | % | Sim. to ISO 62 |
| ^[C] Humidity absorption | 0.2 | % | Sim. to ISO 62 |
| ^[C] Density | 1190 | kg/m ³ | ISO 1183 |

[C]: CAMPUS

| Test specimen production | Value | Unit | Test Standard |
|--|-------|------|---------------|
| ISO Data | | | |
| ^[C] Injection Molding, melt temperature | 260 | °C | ISO 294 |
| Injection Molding, mold temperature | 80 | °C | ISO 294 |

[C]: CAMPUS

| Processing Recommendation Injection Molding | Value | Unit | Test Standard |
|--|------------------|-------------|----------------------|
| Pre-drying - Temperature | 100 - 120 | °C | - |
| Pre-drying - Time | 4 - 6 | h | - |
| Processing humidity | ≤0.03 | % | - |
| Melt temperature | 270 - 300 | °C | - |
| Mold temperature | 80 - 120 | °C | - |
| Zone 1 | 260 - 280 | °C | - |
| Zone 2 | 270 - 290 | °C | - |
| Zone 3 | 270 - 300 | °C | - |
| Nozzle temperature | 270 - 290 | °C | - |

Characteristics**Processing**

Injection Molding

Special Characteristics

Platable

Delivery form

Pellets

Regional Availability

North America, Europe, Asia Pacific

Additives

Release agent

Other text information**Injection molding**[Injection Molding Recommendations](#)