

Technical Data Sheet

Sustanat[®] PC GF 20 black

PC

Typical characteristics

- High heat deflection temperature
- Self-extinguishing
- Low moisture absorption
- Electrically insulating
- High stiffness

Typical industries

- Mechanical Engineering Industry
- Electronics
- Aerospace

| | Test method | Unit | Guideline value |
|---|-----------------------------|----------------------|-----------------|
| General properties | | | |
| Density | DIN EN ISO 1183-1 | g / cm ³ | 1,33 |
| Water absorption | DIN EN ISO 62 | % | 0,2 |
| Flammability (Thickness 3 mm / 6 mm) | UL 94 | | V0 / V0 |
| Mechanical properties | | | |
| Yield stress | DIN EN ISO 527 | MPa | 85 |
| Elongation at break | DIN EN ISO 527 | % | 5 |
| Tensile modulus of elasticity | DIN EN ISO 527 | MPa | 3800 |
| Notched impact strength | DIN EN ISO 179 | kJ / m ² | 8 |
| Shore hardness | DIN EN ISO 868 | scale D | 85 |
| Thermal properties | | | |
| Melting temperature | ISO 11357-3 | °C | - |
| Glass transition temperature | ISO 11357-3 | °C | 150 |
| Thermal conductivity | DIN 52612-1 | W / (m * K) | 0,22 |
| Coefficient of linear thermal expansion | DIN 53752 | 10 ⁻⁶ / K | 30 |
| Service temperature, long term | Average | °C | -30 ... 120 |
| Service temperature, short term (max.) | Average | °C | 180 |
| Heat deflection temperature | DIN EN ISO 75, Verf. A, HDT | °C | 138 |
| Electrical properties | | | |
| Dielectric constant | IEC 60250 | | 3,3 |
| Dielectric dissipation factor (50 Hz) | IEC 60250 | | 0,01 |



| | Test method | Unit | Guideline value |
|----------------------------|------------------|--------------------------|-----------------|
| Volume resistivity | DIN EN 62631-3-1 | $\Omega \cdot \text{cm}$ | 10^{15} |
| Surface resistivity | DIN EN 62631-3-2 | Ω | 10^{15} |
| Comparative tracking index | IEC 60112 | | 175 |
| Dielectric strength | IEC 60243 | kV / mm | 35 |

