

Technical Data Sheet

Sustarin[®] C PIR black

Typical characteristics

- Sustainable Plastic
- Chemical resistance
- Low moisture absorption
- High abrasion resistance
- ideal combination of tensile strength, stiffness and impact strength
- Low creep tendency
- Good machinability
- favourable electric and dielectric behaviour
- Good dimensional stability
- Good sliding properties

Typical industries

- Mechanical Engineering Industry
- Oil and Gas
- Conveyor Technology & Automation
- Electronics
- Vehicle Construction
- Agriculture Industry
- Renewable Energies

| | Test method | Unit | Guideline value |
|---|-------------------|----------------------|-----------------|
| General properties | | | |
| Density | DIN EN ISO 1183-1 | g / cm ³ | 1,41 |
| Water absorption | DIN EN ISO 62 | % | 0,2 |
| Flammability | UL 94 | | HB/HB |
| Mechanical properties | | | |
| Yield stress | DIN EN ISO 527 | MPa | 65 |
| Elongation at break | DIN EN ISO 527 | % | 30 |
| Tensile modulus of elasticity | DIN EN ISO 527 | MPa | 2700 |
| Notched impact strength | DIN EN ISO 179 | kJ / m ² | 6 |
| Shore hardness | DIN EN ISO 868 | scale D | 80 |
| Thermal properties | | | |
| Melting temperature | ISO 11357-3 | °C | 165 |
| Thermal conductivity | DIN 52612-1 | W / (m * K) | 0,31 |
| Thermal capacity | DIN 52612 | kJ / (kg * K) | 1,50 |
| Coefficient of linear thermal expansion | DIN 53752 | 10 ⁻⁶ / K | 110 |



| | Test method | Unit | Guideline value |
|--|-----------------------------|--------------------------|-----------------|
| Service temperature, long term | Average | °C | -50...100 |
| Service temperature, short term (max.) | Average | °C | 140 |
| Heat deflection temperature | DIN EN ISO 75, Verf. A, HDT | °C | 110 |
| Electrical properties | | | |
| Dielectric constant | IEC 60250 | | 3,8 |
| Dielectric dissipation factor (50 Hz) | IEC 60250 | | 0,002 |
| Volume resistivity | DIN EN 62631-3-1 | $\Omega \cdot \text{cm}$ | 10^{13} |
| Surface resistivity | DIN EN 62631-3-2 | | 10^{13} |
| Comparative tracking index | IEC 60112 | | 600 |
| Dielectric strength | IEC 60243 | kV / mm | 40 |

