

iglidur® i6, SLS material

I6-PL-10000



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- Good wear resistance
- FDA-compliant for food contact
- Well-suited for worm gears

Product description

Introducing iglidur i6, a premium laser sintering material by igus, designed for food contact applications. This FDA-compliant material boasts excellent abrasion resistance and robustness, making it ideal for worm wheels and components subject to wear. With its accurate surface details and flexibility in design, iglidur i6 allows for efficient production without minimum order quantities. Choose iglidur i6 for reliable performance in demanding environments where food safety is a priority.

Electricity attributes

Specific transitional resistance	> 10 ¹² Ωcm
Surface resistance	> 10 ¹¹ Ω

Physical properties

Thermal expansion coefficient (at 23°C/73°F)	12 K ⁻¹ 10 ⁻⁵ , test method DIN 53752
Heat conductivity	0.14W/(m K), ASTM C 177 test method

General properties

Colour	Off-white
Density	1.06 g/cm ³
Max. moisture absorption	0.8 Wt.-%
Max. total moisture absorption	1.9 Wt.-%

Dynamic properties

Coefficient of sliding friction, dynamic, against Cf53 steel	0.1600
Coefficient of friction, dynamic, against 304 stainless steel	0.2400
pV value, max. (dry)	0.35MPa m/s
Max. recommended surface pressure	34 MPa



Thermal properties

Max. long-term application temperature	80 °C
Max. short-term application temperature	140 °C
Lower application temperature	-40 °C

Properties and approvals

Food industry	Yes
FDA compliant	Yes
PFAS-tested	Yes
ESD compliant	No

Mechanical properties

Tensile strength printed flat	31 MPa
Tensile strength printed upright	28 MPa
Tensile modulus of elasticity	1400 MPa
Flexural strength printed flat	49 MPa
Flexural strength printed upright	38 MPa
Modulus of elasticity	1100 MPa
Shore D hardness	67.0000
Compressive strength	44 MPa

Certificates and standards

