

The iglidur I8-ESD material developed specifically for laser sintering showed improved abrasion resistance compared to conventional materials for laser sintering in tribological tests in the igus test laboratory.

Iglidur I8-ESD is an electrostatically dissipative SLS material for durable, abrasion-resistant 3D printing components. Ideal for applications in the electronics industry where ESD properties are essential to avoid damage to electronic components. Also interesting for all other industries where electrostatic charges should be avoided.

Iglidur I8-ESD is also characterized by particularly high rigidity, which means that the parts produced show less deformation under the same load. Like all other igus 3D printing materials, I8-ESD contains solid lubricants that ensure particularly low friction and make additional lubrication unnecessary.



Manufacturing method:

Laser sintering (SLS)

Application:

Wear parts with ESD requirements, e.g. in the electronics industry

Article number.:

I8-ESD-PL-1000 (1kg) and I8-ESD-PL-10000 (10kg)

Package:

Packaging unit from min. 1kg to 10kg bag

Handling and storage:

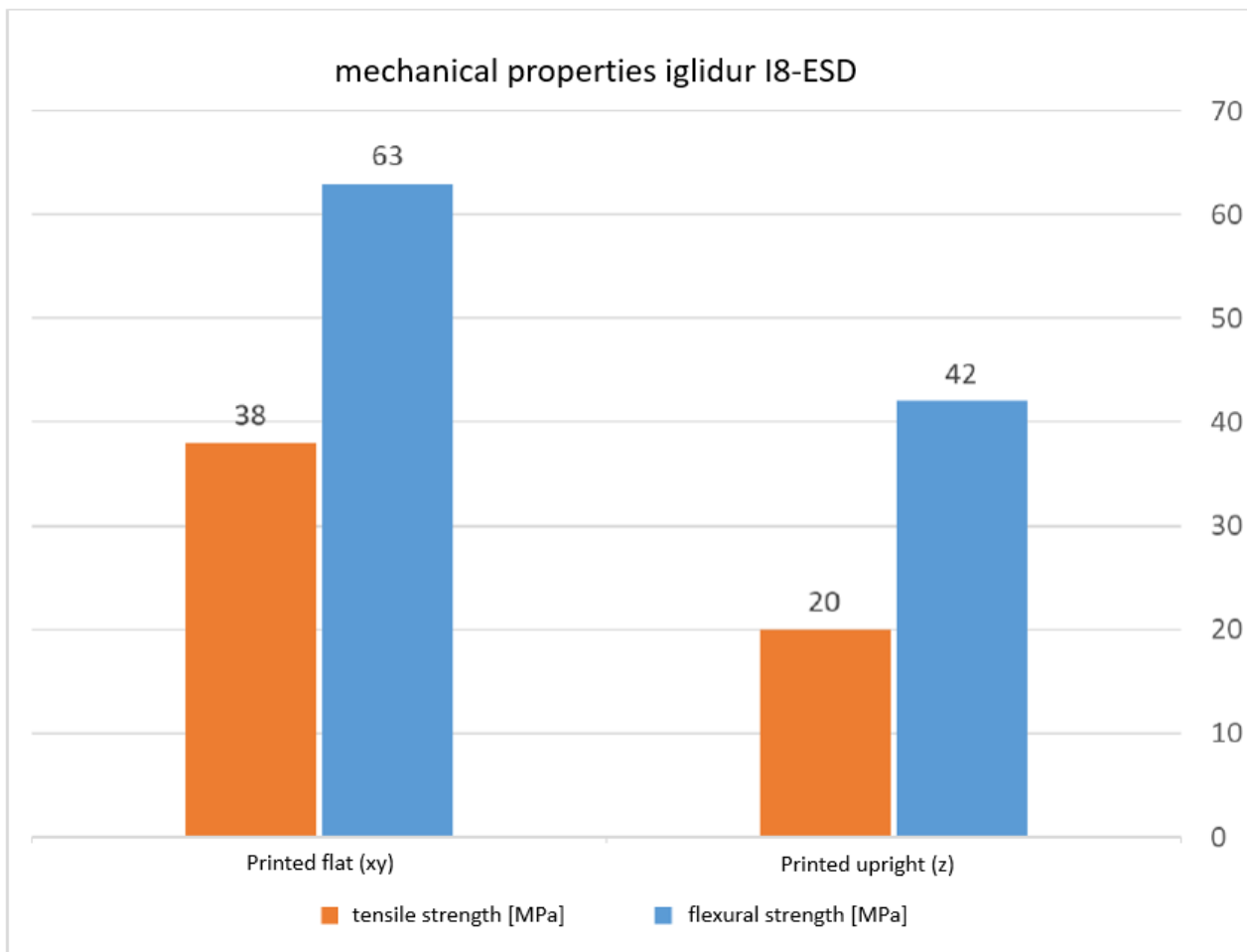
Store dry and cool; avoid absorbing humidity; Note MSDS

FAQ iglidur I8-ESD-PL:

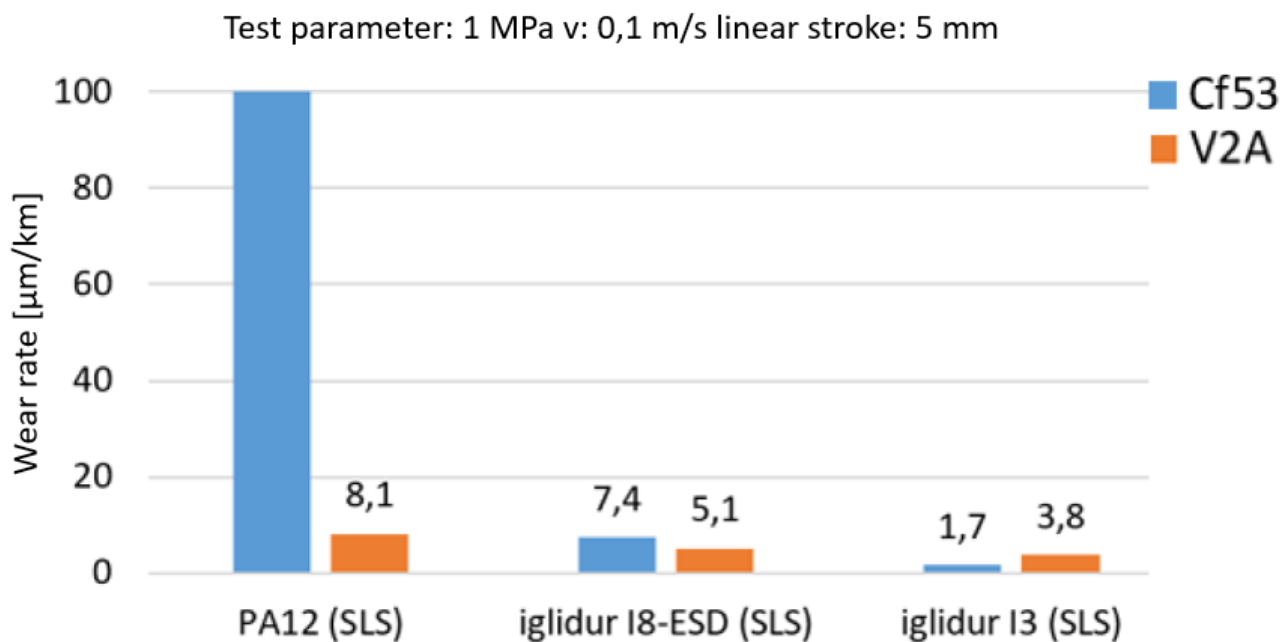
- What are the material strength parameter (flat/upright)?
 - See graph 1 below
- How are the wear properties and the friction coefficient?
 - See graph 2-3 below
- Surface resistancy (XY/ Z print orientation)?
 - Spec. Surface resistancy: 2,8x10⁷ / 3,4x10⁶ Ω x cm
 - Surface resistancy: 3,6x10⁷ / 3,4x10⁷ Ω
- On which machines has the material been processed up to now?
 - Formiga P110 from EOS
- What is the refresh rate?
 - The quota is 100% new material, refreshing with old material is not recommended.
- Which production parameters are recommended?

production settings	Formiga P100/110 (EOS)
Process chamber temperature	170-172 °C
Removal chamber temperature	150-151 °C
Blade type	Standard as for PA2200
Warm up duration	0,8 – 1 °C / min. (2h)
Exposure parameters	Standard parameter as for PA2200
Layer height	100 µm
Minimum removal temperature	60 °C
Powder supply	Vibration unit is recommended

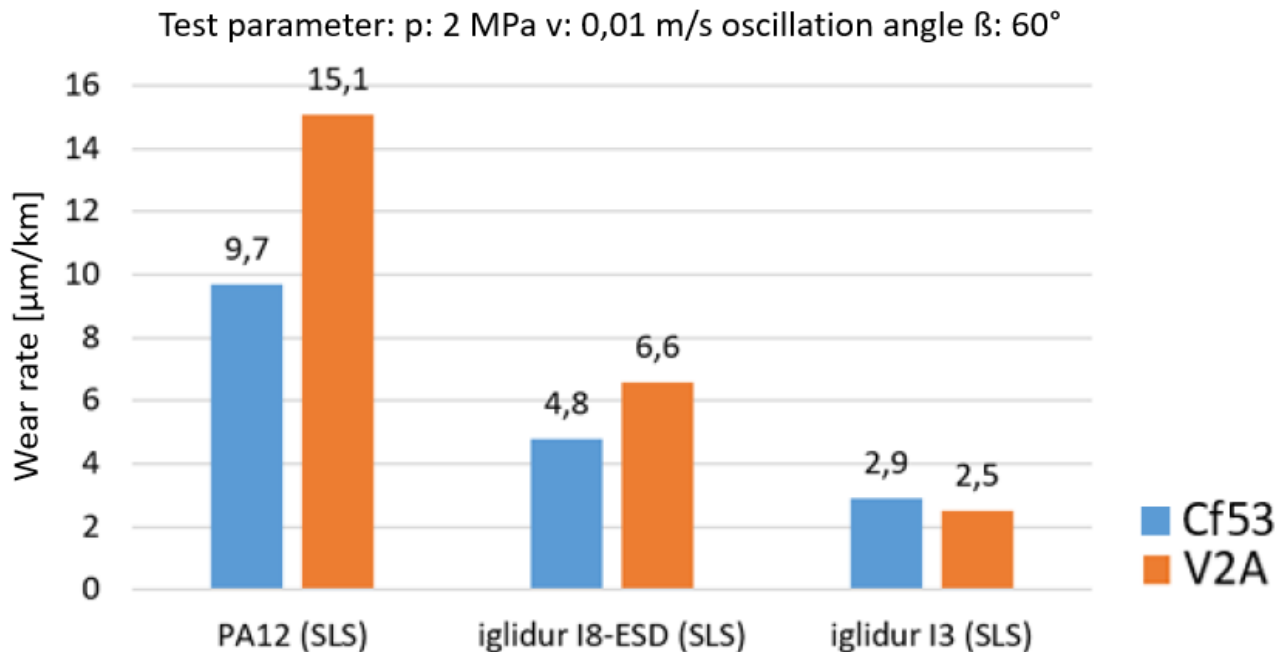
1. Mechanical strength



2. Wear test linear



3. Wear test oscillation



4. Coefficient of friction rotating

friction rotating: coefficient of friction μ over a period of 100 hours
v=0,1 m/s - p = 1 MPa - shaft material: Cf53

