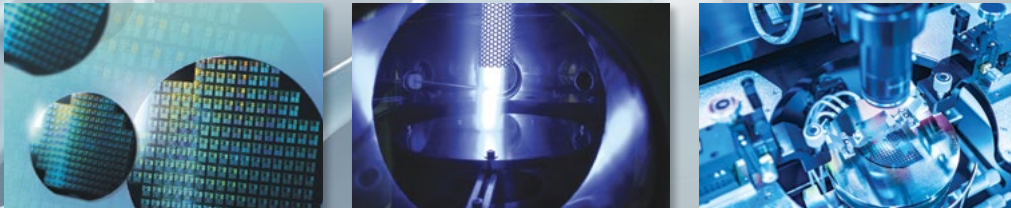


Isolast® PureFab™ JPF20



A new level of plasma resistance for the most aggressive semiconductor applications

Isolast® PureFab™ JPF20 is a perfluoroelastomer compound with excellent resistance to oxygen and fluorine-based plasmas, exhibiting perfect performance in both radical and ion rich plasmas.

The material comprises a fully fluorinated polymer backbone and unique cross-linking technology to achieve the best sealing performance, even in the most demanding processes and tool locations. With an advanced and superior nanoparticle filler system, Isolast® PureFab™ JPF20 provides the ultimate plasma resistance, while minimizing particle generation.

The continuous operating temperature of the material is up to +320 °C/+608 °F. This and its low trace metal content, makes it the perfect material for aggressive etch applications.

Special Features

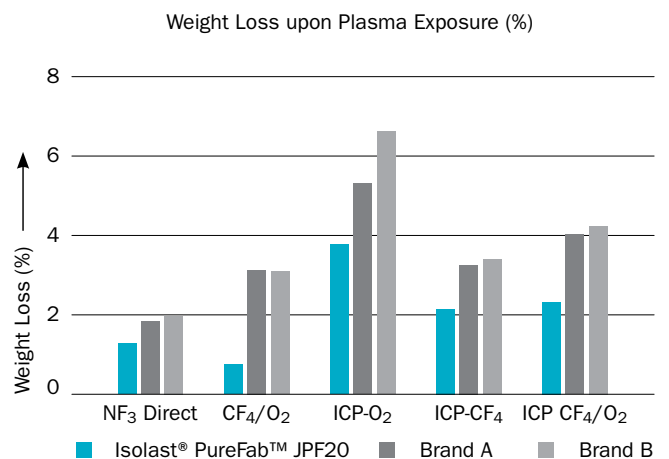
- Nanoparticle filler system provides maximum resistance to aggressive ion and radical rich plasmas
- Very low particle generation due to advanced elastomer formulation with relatively low amount of filler content
- Excellent high temperature stability allows use in critical locations
- Continuous service temperature up to +320 °C/+608 °F

Typical Applications

- Etch processes: dry etch, ALE, dielectric etch
- Chamber lid seals
- Plasma showerhead and delivery tube seals
- Bonded slit valve doors

Plasma Resistance

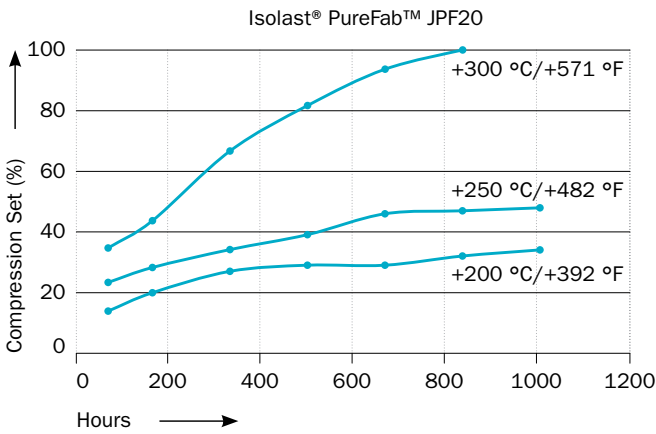
The outstanding plasma resistance of Isolast® PureFab™ JPF20 is indicated by its lower weight loss compared to other brands.



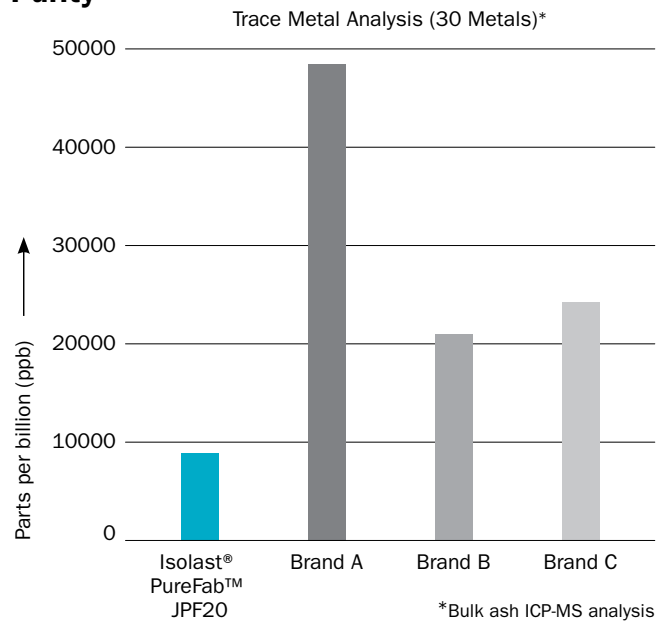
| General Data | JPF20 |
|----------------|-------|
| Elastomer Type | FFKM |
| Color | Gray |

| Properties | Test Method | Results |
|--------------------------------|-------------|-----------------------|
| Hardness (Shore A) | D2240 | 68 |
| Tensile Strength (MPa) | D1414 | 10.3 |
| Elongation at Break (%) | D1414 | 265 |
| Modulus 100% (MPa) | D1414 | 1.75 |
| Compression Set (%) | | |
| 72h @+200 °C/+392 °F | | 14 |
| 72h @+250 °C/+482 °F | D395 | 23 |
| 72h @+300 °C/+572 °F | | 35 |
| Continuous Service Temperature | | Up to +320 °C/+608 °F |

Compression Set



Purity



Trelleborg Sealing Solutions offers decades of engineering and applications experience, as well as the latest knowledge in the design of high precision, customized sealing solutions for critical semiconductor applications.

The Isolast® PureFab™ range provides a unique and focused material portfolio to match the process chemistry, system location and tool complexity of demanding semiconductor environments, delivering the ultimate in high purity sealing performance in plasma and at high temperatures.

Partner with Trelleborg to benefit from local specialist support, global reach and dedicated regional semiconductor experts. These three pillars ensure best in class service levels, from design, prototyping and delivery through to serial production. This industry-leading design support and our digital tools are key assets to accelerate performance.



For more information and contact details scan the QR code or visit www.tss.trelleborg.com