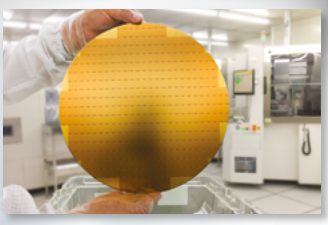
# Isolast® PureFab® JPF41

## BLACK PERFLUOROELASTOMER FOR CHEMICAL RESISTANCE IN WET AND DRY SEMICONDUCTOR APPLICATIONS





**Optimized chemical resistance against acids, solvents and oils and enhanced mechanical strength for effective sealing in a wide range of critical semiconductor processes.**

Isolast® PureFab® JPF41 is a high-performance black perfluoroelastomer (FFKM) compound developed for general-purpose sealing in semiconductor equipment.

It delivers exceptional chemical resistance and mechanical strength, making it ideal for a wide range of static and dynamic sealing applications.

With superior resistance to aggressive chemicals, oils and solvents, combined with a reliable compression set profile, Isolast® PureFab® JPF41 is a trusted solution for maintaining seal integrity in demanding wet and dry process environments up to +270 °C/+518 °F.

### ISOLAST® PUREFAB®

The Isolast® PureFab® range is a dedicated portfolio of perfluoroelastomer (FFKM) materials engineered for the most demanding semiconductor environments. Each grade is carefully optimized for specific application requirements, considering process chemistry, system location and tool complexity — delivering exceptional high-purity sealing performance in plasma environments and under high-temperature conditions.

### Features and Benefits

- Wide chemical compatibility for reliable performance against strong acids and plasma etch byproducts
- Excellent resistance to oils and solvents – ideal for wet processing equipment, cleaning systems and vacuum pump interfaces
- High mechanical strength ensures stable operation in both static and dynamic sealing applications
- Exceptional compression set resistance maintains shape and sealing force under sustained heat and mechanical load
- Manufactured in a wide selection of designs, including O-Rings and custom components to meet diverse requirements

### Application Examples

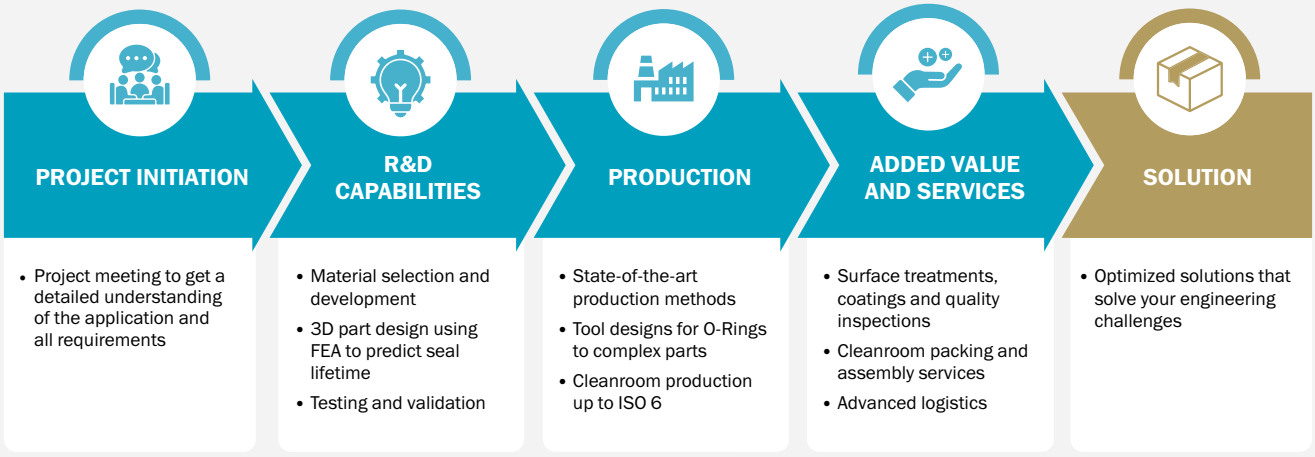
- Dynamic or static general-purpose seals and components within wet benches, furnaces and transfer chambers
- Chamber lid and gas inlet and outlet seals
- Slit valve door seals

# ISOLAST® PUREFAB® JPF41

| General Data | Isolast® PureFab® JPF41 |
|---|---|
| **Elastomer Type** | FFKM |
| **Color** | Black |

| Properties | Test Method | Results |
|---|---|---|
| **Hardness (Shore A)** | ASTM D2240 | 75 |
| **Tensile Strength (MPa)** | ASTM D412 | 18.7 |
| **Elongation at Break (%)** | ASTM D412 | 185 |
| **Modulus 100% (MPa)** | ASTM D412 | 7.0 |
| **Compression Set (%)** 72h @ +200 °C / +392 °F | ASTM D395 | 19 |
| **Continuous Service Temperature** | | -5 °C to +270 °C / +14 °F to +518 °F |

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**For more information and contact details visit: www.trelleborg.com/seals**

The information in this publication is intended for general reference only and not for specific applications. Customers must satisfy themselves with the suitability of a product and material for their individual applications.

Color variations, including dark spots, are a normal result of the polymer curing process and do not indicate the presence of foreign matter or negatively impact performance, reliability or cleanliness.

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