



Isolast® J9538

**A NEW LEVEL OF PERFORMANCE FOR PHARMACEUTICAL,
HEALTHCARE & MEDICAL AND FOOD HANDLING APPLICATIONS**



Isolast® perfluoroelastomer compound J9538 has been designed for mechanically demanding pharmaceutical, healthcare, medical and food handling applications where maximum resistance to high temperatures and superior chemical resistance are crucial.

The Isolast® range of high specification perfluoroelastomer compounds has been developed to provide equipment manufacturers and end users with sealing solutions compatible with virtually all chemical media, over the widest temperature range possible. Unique Isolast® formulations give real benefits and cost advantages by providing optimum seal reliability and extending service life.

Trelleborg Sealing Solutions has been involved in sealing food, beverage, pharmaceutical and healthcare & medical applications since the 1960s and focuses on meeting new challenges with revolutionary products and materials, exceeding the most stringent industry standards.

Isolast® J9538 is ideal for use in critical food, beverage, healthcare, medical and pharmaceutical processing applications where thermal stability, superior chemical resistance and low contamination from extractables are required. Combined with its superior mechanical properties, Isolast J9538 is completely suited for both static and dynamic applications. Engineered to achieve enhanced thermal and chemical stability, Isolast J9538 parts perfect for Cleaning-in-Place (CIP), Steam-in Place (SIP) and other aggressive systems, such as Water-for-Injection (WFI) where seal materials must be chosen with extreme care in order to extend seal life and reduce unscheduled downtime.

Special Features

- High tensile strength and superior mechanical properties
- Outstanding chemical resistance to a wide range of chemicals
- Excellent thermal stability up to +250 °C/+482 °F
- Meets all relevant approvals and certifications, including
 - FDA 21 CFR 177.2600
 - 3-A Sanitary Standard 18-03, Class 1
 - USP Chapter 87
 - ADI free

Typical Applications

- Mechanical seals
- Rotating equipment such as mixers, pumps, and centrifuges
- Flow regulation including valves
- Filtration and drying

Isolast® J9538 is available in all standard international O-Ring sizes along with custom-engineered solutions and FlexiMold™ large diameter joint free seals.

MATERIAL DATASHEET FOR J9538

| General data | J9538 |
|------------------------|--|
| Basic polymer | FFKM |
| Color | black |
| Hardness | 75+/-5 Shore A |
| Temperature range | -10 °C to +250 °C +14 °F to +482 °F |
| Excursion temperature* | -10 °C to +275 °C +14 °F to +527 °F |

| Properties | Standard | Typical Results |
|--|----------------|--|
| Density | ISO 2781 | 2.00 g/cm ³ /0.072 lb/in ³ |
| Tensile Strength | ISO 37 | 22.3 MPa/3234 psi |
| Modulus at 50% Elongation | ISO 37 | 3.6 MPa/522 psi |
| Modulus at 100% Elongation | ISO 37 | 11.6 MPa/1682 psi |
| Elongation at Break | ISO 37 | 177% |
| Compression Set 24 h/+200 °C/+392 °F | ISO 815 Type B | 21.9% |
| Low Temperature Behavior TR 10 point | ISO 2921 | -3 °C/+26.6 °F |
| Fluid Immersion Testing: Methanol 168 h/+40 °C/+104 °F Change in Volume | ISO 1817 | +0.3% |
| Fluid Immersion Testing: Glacial Acetic Acid 168 h/+70 °C/+158 °F Change in Volume | ISO 1817 | +2.7% |
| Fluid Immersion Testing: Toluene 168 h/+23 °C/+73.4 °F Change in Volume | ISO 1817 | +0.3% |
| Fluid Immersion Testing: Sodium Hydroxide 50% 168 h/+70 °C Change in Volume | ISO 2921 | -0.5% |

*Maximum and minimum temperatures have to be agreed according to specific application criteria



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