

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, Class VI
 - 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%	ISO 2921	
168 h/+70 °C Change in Volume		-0.5%

 $\ast \mbox{Maximum}$ and minimum temperatures have to be agreed according to specific application criteria

