



Isolast® Universal J9503

SUPERIOR SEALING RESISTANT TO VIRTUALLY ALL CHEMICALS



Isolast® Universal J9503

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. Seal performance is further enhanced by superior hysteresis and compression set characteristics, which ensure high elasticity and dynamic recovery, minimizing risk of seal failure.

Isolast® J9503 material grade is an advanced perfluoroelastomer compound developed to give unrivalled chemical resistance in the broadest range of chemical media, including organic and inorganic oxides, acids, alkalis, amines, esters and steam, at continuous operating temperatures from -25°C to +240°C / -13°F to +464°F.

Isolast® J9509 material grade, a development of Isolast® J9503, has an increased hardness of 90 Shore A offering improved extrusion resistance in high-pressure applications typically encountered in the oil & gas and hydrocarbon processing industries.

Isolast® J9501 (80 Shore A) and 9505 (70 Shore A) white material grades have been developed for use in strong oxidizing media such as halogens, ozone or hot oxidizing acids.

Features

- Almost universal chemical compatibility
- Thermal stability from -25°C to +240°C / -13°C to +464°F
- Excellent long-term compression set characteristics
- Exceptional hysteresis properties
- Isolast® J9503 offers superior extrusion resistance
- Available as standard and non-standard O Rings, custom-molded designs and bonded products

Applications

- Chemical processing
- Hydrocarbon processing
- Oil and Gas industry, offshore and onshore
- Pharmaceutical and food processing
- Aerospace industry
- Diesel engines
- Power generation
- Lacquer, print and coatings industry
- Semiconductor fabrication

ISOLAST® UNIVERSAL J9503 COMPOUND DATA

| | | | | |
|-----------------------------|----------------------|---------------------|--------------------------------|--------------------------|
| Compound Number: | | J9503 | | |
| Elastomer base: | DIN ISO 1629 | FFKM | | |
| Hardness: | DIN 53 505 | 75 +/- 5 Shore A | | |
| Color: | black | | | |
| Specific gravity: | | DIN 53 479 | g/cm ³ | 1.94 ± -0.03 |
| Tensile strength: | | DIN 53 504 | MPa N/mm ² / psi | 12.5 / 1,813 |
| Elongation at break: | | DIN 53 504 | % | 120 |
| Compression set: | 72 h / 200°C / 392°F | DIN ISO 815 Type B | % | 25 |
| Service temperature: | | | °C/°F | -25 / +240 -13 / +464 |

Material properties are average values resulting from tests, as specified, on standard test samples. The values are for guidance only. It is the responsibility of the user to test material for suitability within a specific application. Information is correct at time of publication.

Trelleborg Sealing Solutions offers to the semiconductor industry:

- Quality levels to ISO 9001-2000 including 100% inspection and zero defects
- Wash and pack to class 100 standards
- Leading-edge in-house polymer development test capability
- Sealing solutions using our extensive design facilities, including material specific non-linear Finite Element Analysis (FEA)
- Comprehensive technical support and after-sales service through the global Trelleborg Sealing Solutions network



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