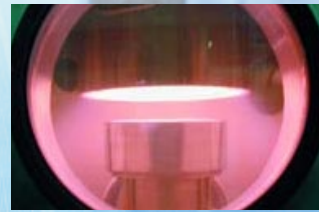
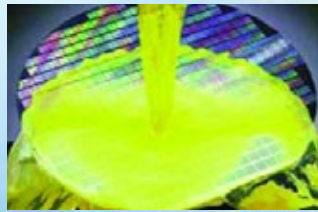




Isolast® Fab Range™ J9675

UNIVERSAL SEALING IN DRY/PLASMA WAFER PROCESSES



Isolast® Fab Range™ J9675

Isolast® J9675 is a new cream-colored perfluoroelastomer compound, developed to offer excellent chemical resistance and minimal particulation across a wide range of wafer processes and all fluorine- and oxygen-based plasma environments. Unique curing and filler systems ensure excellent long-term properties retention in continuous service temperatures to +300°C / +572°F. Isolast® J9675 is the ideal candidate to be used in multiple seal geometries across a wide range of static and dynamic applications in all wafer processing tools.

Applications

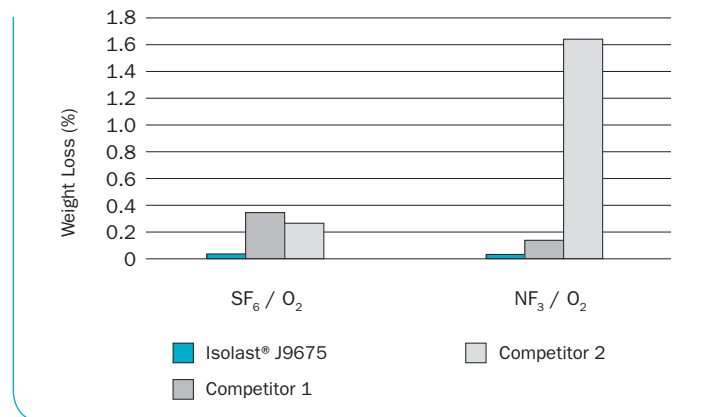
- Deposition (CVD, PECVD, HDPCVD, RPCVD, APCVD, SACVD, DCVD)
- Oxidation
- Diffusion
- Etching
- Ashing
- Metallization
- RTP

Typical Physical Properties

Elastomer Type		FFKM	
Color		Cream	
Hardness, Shore A	Pts.	75	
Tensile Strength	MPa N/mm ²	10.0	
	psi	1400	
Elongation at Break	%	200	
Modulus 100%	MPa N/mm ²	3.5	
	psi	500	
Compression Set, max.			
	72h @ +204°C / +400°F	%	20
	72h @ +275°C / +527°F		28
Continuous Service Temperature		-15°C to +300°C +5°F to +572°F	

Note: unless otherwise noted, all tests are performed on standard test sheets. Compression set tested on AS-568A-214 O-Rings.

Plasma Resistance in NF₃ / O₂ and SF₆ / O₂ (90 min plasma immersion)

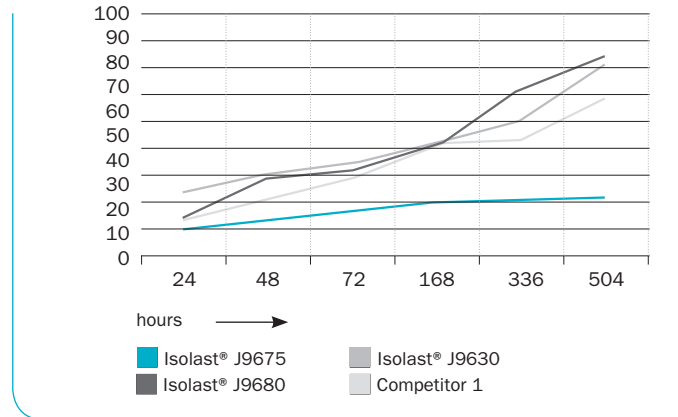


ISOLAST® FAB RANGE™ J9675 TECHNICAL DATA

Features:

- High purity
- Extremely low cationic and TOC leach out in various wet fluids (UPDI, strippers etc.)
- Excellent resistance to all dry and plasma-based wafer processing chemistries
- Continuous service temperatures to +300°C / +572°F
- Outstanding long-term properties retention
- Available in O-Rings, square and special section seals, V-Rings®, as well as custom molded seals and engineered solutions
- Standard product finishing in Class 100 Cleanroom

Compression Set Results @ +250°C / +482°F



Field experiences with Isolast® Fab Range™ J9675

- Wafer Seal – Electrochemical Plating (ECP) process
 - Lower particulation and increased wafer count with Isolast® J9675 over competitive FFKM
- Slit Door – 300mm Dry Etch Process Chamber
 - Solve sticking problem and lower particle generation with Isolast® J9675 over competitive FFKM
- O-Ring – PC manifold in 300mm Etcher
 - Isolast® J9675 solved seal cracking problem and surpassed service life with existing FKM seal

Isolast® Fab Range™ Seals are part of the Trelleborg Sealing Solutions product portfolio developed for the Semiconductor industry. Trelleborg Sealing Solutions is a full service supplier to the Semiconductor and other industries encompassing:

- Wide range of sealing materials and products
- Engineered Sealing Solutions
- Technical, logistics, and sales support through the global Trelleborg Sealing Solutions network
- Material development to meet tomorrow's market requirements
- Vast Application Engineering Experience
- Innovation in Product Design including NLFEA modeling
- ISO 9001 Quality Standards
- Standard product finishing in Class 100 Cleanroom

The indicated material properties are average values determined with the use of standard test labs according to the corresponding specification. These values cannot be used as specification values and may be different from the material properties of finished parts. This is to emphasize that the end user is requested to test the material with regard to its suitability in the application. This information is not subject to an automatic update.

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