

VALQUA Semiconductor Industry Products

DS403

High Performance Elastomer
FKM/FFKM O-Ring

❖ Product & Benefits

DS403 is a material with excellent mechanical and crack resistant properties for dynamic locations. It is suited for plasma processes such as Etching, Ashing and PECVD.

❖ Featured Benefits

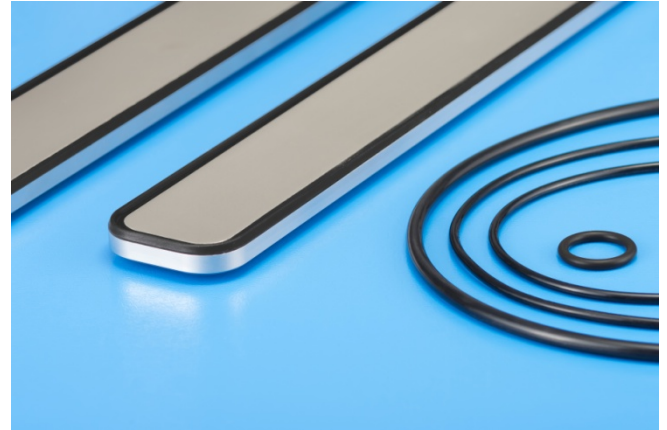
- FKM/FFKM Grade Material Suited for Dynamic Locations
- Sealing Properties of FKM as well as Radical Resistance Comparable to FFKM

❖ Applications

- Dry Etch Equipment
- Plasma Enhanced CVD Equipment
- Plasma Ashing Equipment
- Seals for Plasma Equipment

❖ Contact Us

Valqua America, Inc.
4655 Old Ironsides Dr #380
Santa Clara, CA 95054
www.valqua-america.com



❖ Typical Properties

	Color	Transparent Deep Amber
Hardness (Shore A)		69
Tensile Strength (MPa)		13.7
Elongation (%)		160
Modulus 100% Elongation (MPa)		5.3
Maximum Temperature (°C)		200
Compression Set (%)		38

*Compression Set: 25% compression at 200°C for 72 hours
Values above are actual measurements, not standards*

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Additional information

DS403

VALQUA AMERICA, INC.

❖ Mechanical Properties

Radical Exposure Test 1

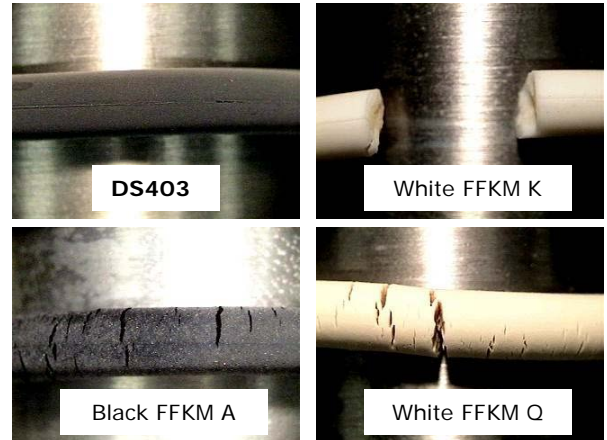
Test Conditions

Equipment: Parallel flat plasma tool

Plasma power: RF500W

Gas: O₂+CF₄

Irradiation time: 1.5 hours direct attack
(10% stretching)



Radical Exposure Test 2

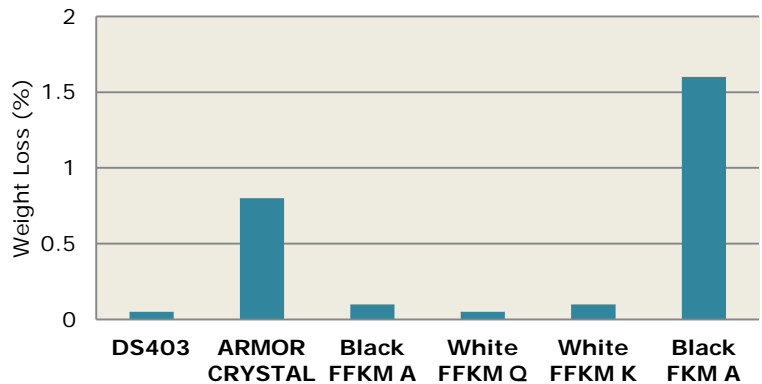
Test Conditions

Equipment: Parallel flat plasma tool

Plasma power: RF500W

Gas: O₂+CF₄

Irradiation time: 3 hours down flow attack



Recovery Property

Test Conditions

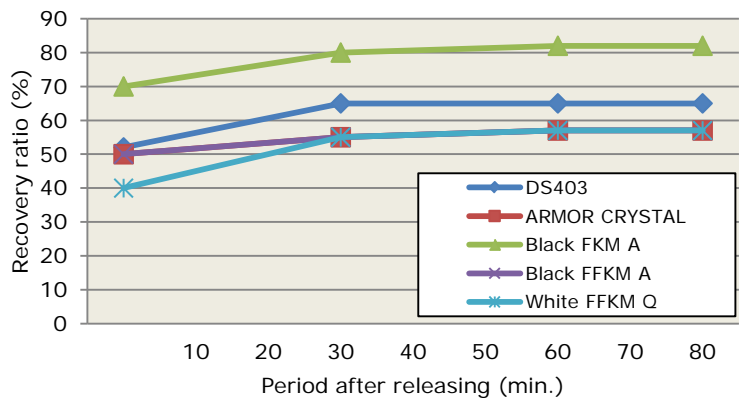
Temperature:

90°C (24 hours)

→25°C (24 hours under the compression)

Squeeze Ratio: 22%

Test Piece: AS568-214



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