

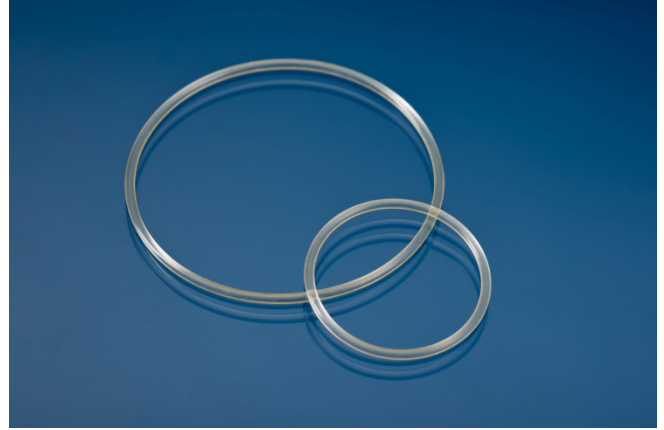
VALQUA Semiconductor Industry Products

HYREC ARMOR™

High Performance Elastomer FKM O-Ring

❖ Product & Benefits

HYREC ARMOR® is a softer FKM suited for static seal locations, with excellent purity and improved radical resistance compared to the conventional FKM. It may be used for dry etch, ashing, CVD processes.



❖ Featured Benefits

- A Softer FKM with Excellent Compression Set for Static Locations
- Low Adhesion to Quartz and Improved Radical Resistance

❖ Applications

- Dry Etch Equipment
- Plasma Enhanced CVD Equipment
- Plasma Ashing 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)	58
Tensile Strength (MPa)	13
Elongation (%)	440
Modulus 100% Elongation (MPa)	1.2
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

HYREC ARMOR™



❖ Mechanical Properties

Actual Equipment Evaluation Example

Scanning electron micrograph of elastomer surface after plasma exposure

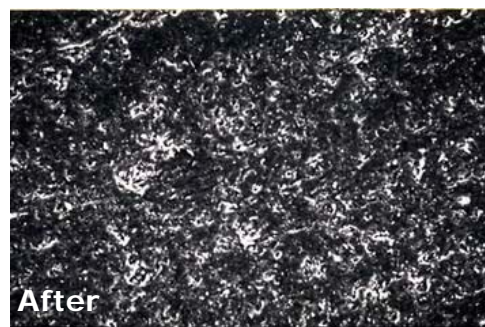
Equipment: Etcher
O-ring Size: AS568A-207 **Gas:** Cl₂ +BCl₃+Ar **Plasma Power:** 1000-1500W **Temp:** 100-200°C
Evaluation Period: HYREC ARMOR 2 months Competitor 1.5 months



HYREC ARMOR™
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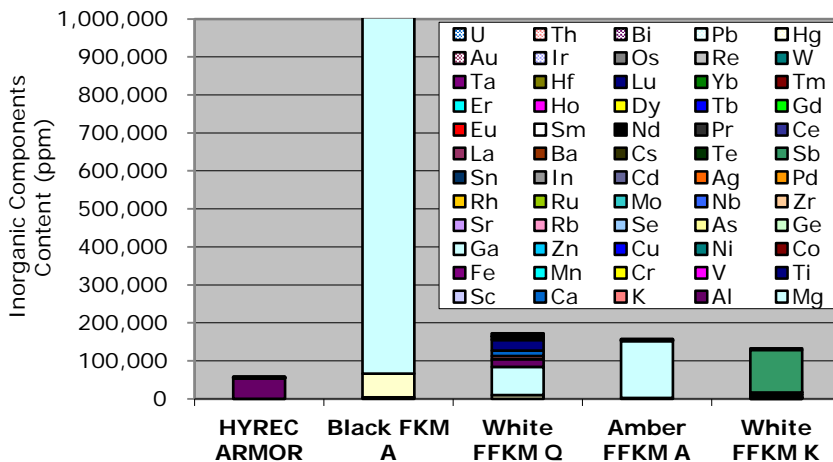


Competitor
 Perfluoroelastomer
 White
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Inorganic Components Content

Test Conditions
Measuring method: ICP/MS analysis
Inorganic elements: Total of 62 elements



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