

# VALQUA Semiconductor Industry Products

## DC156

### High Performance Elastomer FKM O-Ring

#### ❖ Product & Benefits

**DC156** has excellent properties in terms of crack resistance upon radical exposure and weight loss. Its low adhesion properties and cleanness make the DC156 suitable for static applications in CVD and Etching/Ashing processes.

#### ❖ Featured Benefits

- A Softer FKM with Excellent Adhesion Properties for Static Locations
- Improved Anti-Cracking and Radical Resistance from General Fluoro-Elastomers

#### ❖ Applications

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

#### ❖ Contact Us

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#### ❖ Typical Properties

Color	Midnight Blue
Hardness (Shore A)	62
Tensile Strength (MPa)	12.1
Elongation (%)	250
Modulus 100% Elongation (MPa)	1.5
Maximum Temperature (°C)	200
Compression Set (%)	25

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

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# Additional information

# DC156

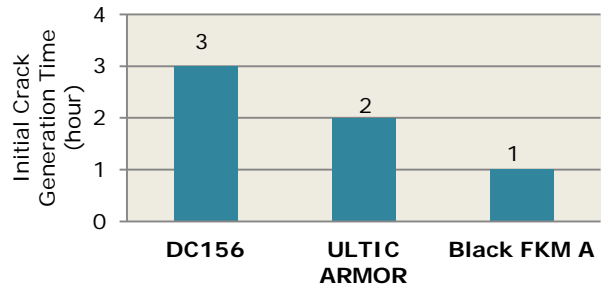
VALQUA AMERICA, INC.

## ❖ Mechanical Properties

### Radical Exposure Test (Anti-cracking property)

Test Conditions

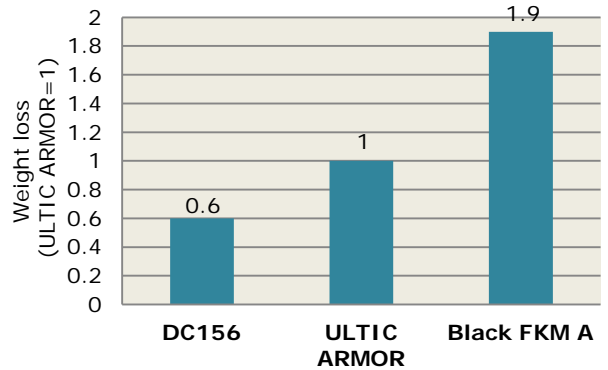
**Equipment:** Parallel flat plasma tool  
**Plasma power:** RF300W  
**Gas:** O2+CF4 (196:4)  
**Irradiation condition:** Down flow attack  
**Test piece:** AS568A-214 with 28% stretching condition



### Radical Exposure Test (Weight loss)

Test Conditions

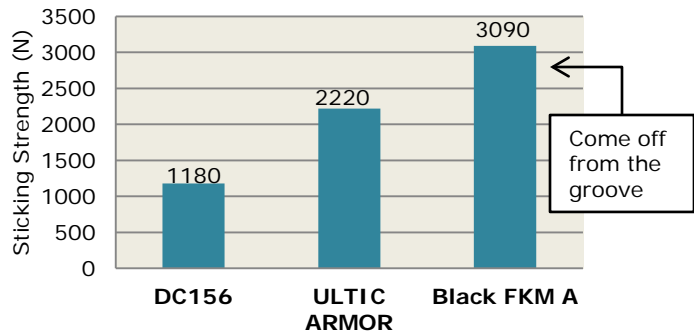
**Equipment:** Parallel flat plasma tool  
**Plasma power:** RF300W  
**Gas:** O2+CF4 (196:4)  
**Irradiation condition:** 6 hours down flow attack  
**Test piece:** AS568A-214 with 0% stretching condition



### Sticking Strength

Test Conditions

**Temperature:** 80°C  
**Heating time:** 72h  
**Test piece:** AS568-270 (Actual gate valve)  
**Counter face:** Anodized aluminum



### Inorganic Components Content

Test Conditions

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

