

# ULTIC ARMOR - F™



## TYPICAL PROPERTIES

Color	Hardness (Shore A)	Tensile strength (MPa)	Elongation (%)	Modulus 100% elongation (MPa)	Service temperature range	Compression Set (%)
Midnight Blue	67	12.4	140	5.4	~200°C	28

Compression Set: After squeezing 25% at 200°C x 72 hours

Above values are actual measurements, not standards.

## Features

- Heat & Radical Resistance
- Low Adhesion to Quartz & Metal
- Low Metallic Impurities
- Low Compression Set
- Excellent Crack Resistance
- Excellent Seal Ability for Dynamic Seal Location

## Applications

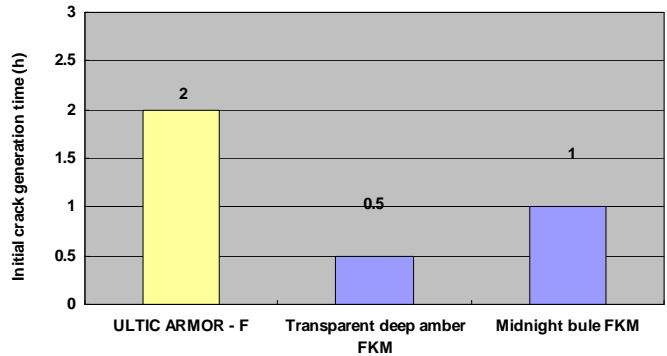
- All CVD Applications
- Dry Etch Equipment
- Plasma Ashing Equipment



VALQUA KOREA Co., Ltd.

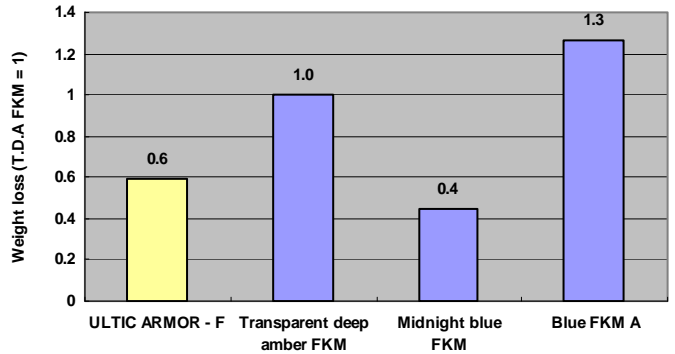
**Radical Exposure Test ~Anti-cracking property~**

**Test conditions**  
 Equipment: Parallel flat plasma tool  
 Plasma power: RF300W Gas: O2+CF4 (190 : 10)  
 Irradiation condition: Down flow attack  
 Test piece: AS568A-214 with 28% stretching condition



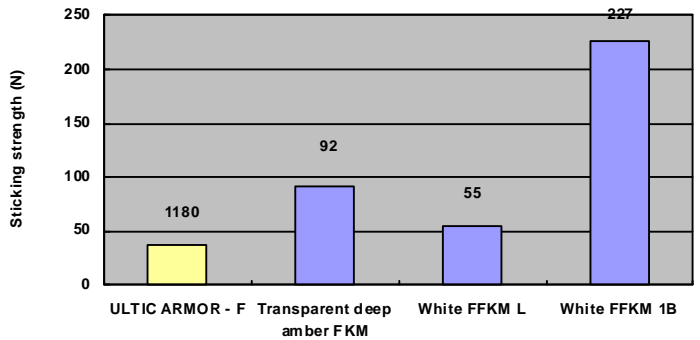
**Radical Exposure Test ~Weight loss~**

**Test conditions**  
 Equipment: Parallel flat plasma tool  
 Plasma power: RF300W Gas: O2+CF4 (190 : 10)  
 Irradiation condition: 6hours down flow attack  
 Test piece: AS568A-214 with 0% stretching condition



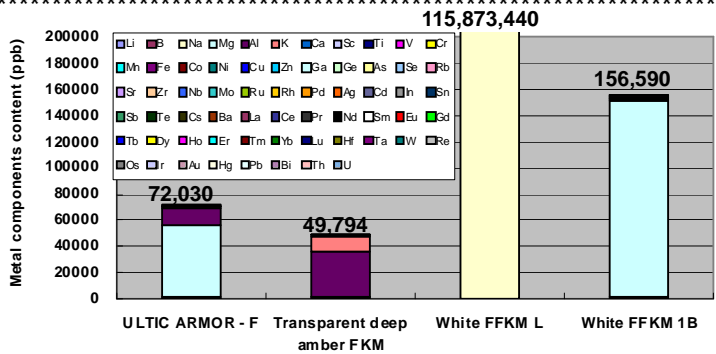
**Sticking Strength**

**Test conditions**  
 Temperature: 60°C  
 Heating time: 72h  
 Compression ratio: 15%  
 Test piece: AS568-214  
 Counter face: Anodized aluminum



**Inorganic components content**

**Test conditions**  
 Measuring method: ICP/ MS analysis  
 Inorganic elements (Total of 62 elements)



All trademarks and registered trademarks noted in this file are the exclusive property of Nippon Valqua Industries, Ltd. unless otherwise specified. This document is made for use in Japan. Although these data are created based on the data and the information of December 2009, Nippon Valqua Industries Ltd. may change these data without notice for the reason of improvement in functional of a product, standard revision and others. Please note the following point in use of these data. (1) An operating temperature, pressure range, durability, etc. indicated in this catalogue do not assume each operation conditions but show the application possibility based on our company data, an actual result, etc. Therefore, please use these data after checking the aptitude in actual use environment. (2) The data contained within this catalogue can only be taken as a guide. (3) A standard, a value, etc. are the purposes made legible, and may be performing an extract, recombination, arrangement, conversion, etc. of a value. (4) Although the maximum attention was paid in this data creation, Nippon Valqua Industries Ltd. will not accept responsibility for any loss incurred through error or omission. Please contact your distributor or VALQUA group if you have any questions. (5) This document contains confidential information. So please do not disclose this confidential information to the third party without our company's permission.  
 © 2009 Nippon Valqua Industries, Ltd. All rights reserved.  
 Manufactured in Japan.



**VALQUA KOREA Co., Ltd.**  
<http://www.valqua.co.kr>

**Contact:**

**VALQUA KOREA Co., Ltd.**  
 Bookook Securities B/D#602, 34-2 Yeuido-Dong,  
 Yeongdeungpo-Gu, Seoul, Korea (150-995)  
 Tel: +82-2-786-6718, Fax: +82-2-786-6719