SIMRIZ® 486CP FOR SEMI-CON APPLICATIONS

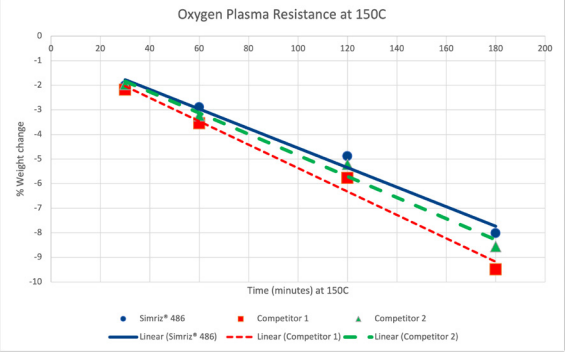


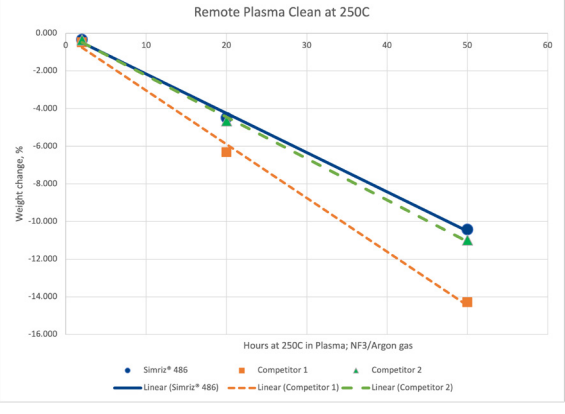
Designed for thermal stability and nearly universal protection against chemical attack, Freudenberg's proprietary family of Simriz® perfluoroelastomer compounds offer premier sealing performance. Simriz® compounds approach PTFE chemical resistance while resisting high temperatures up to 325°C.

Freudenberg is the only vertically integrated supplier of perfluoroelastomer.
Traceable - Accountable – Customized - Controlled

Simriz® 486CP was specifically developed to be a cost-effective, high-performance compound for semiconductor applications. Simriz® 486 offers excellent plasma resistance and low particulation in a wide range of plasma environments.

Simriz® 486CP: The Simriz® 486CP includes post process cleaning and packaging as standard.



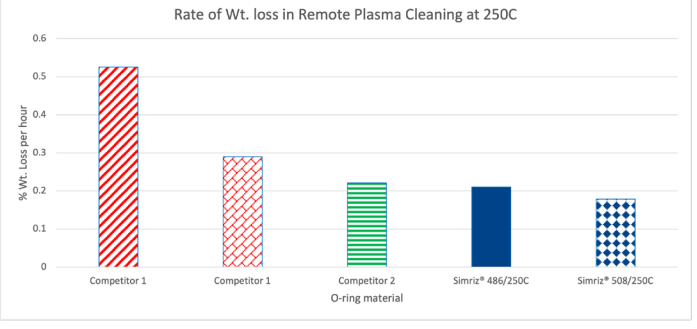


VALUES FOR THE CUSTOMER

- Excellent plasma resistance
- Minimum particulation
- Broad chemical resistance in a large number of harsh chemical environments
- High purity to reduce contamination risk
- Resistance to shed rate/weight reduction
- White color

TYPICAL APPLICATIONS

- Deposition processes: CVD, APCVD, HDPCVD, PECVD, RPCVD, SACVD
- Metalization: PVD, evaporation, sputtering
- Plasma etching and ashing
- Chamber lid and Window seals
- Jar/Gate/Pendulum valve and Exhaust



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FEATURES AND BENEFITS

NOTE - All testing done on AS568-214 size O-rings

Original Properties	
Color	white
Hardness, Shore A, ASTM D2240	75
Tensile Strength, MPa, ASTM D1414	18
Tensile Strength, psi, ASTM D1414	2610
Ultimate Elongation, %, ASTM D1414	190
100% Modulus, MPa, ASTM D1414	8.5
100% Modulus, psi, ASTM D1414	1233
Temperature Retraction, ASTM D1329	
TR-10, degrees C	-3
Compression Set, ASTM D1414 and ASTM 395 Method B, AS568-214 size O-rings, Times and Temperatures as noted	
% Permanent Set, 70 hours at 200°C	25
% Permanent Set, 70 hours at 250°C	42
Water Bomb Immersion, ASTM D471, 70 hrs. at 200°C, Dionized water	
% Volume change	+3.1
Plasma Resistance Tests, ULVAC RBH-3030 test machine, 1500W plasma energy, 6 hours exposure, 0.1 Torr vaccum pressure, gases as noted	
Oxygen, % weight loss	6.9
Carbon tetrafluoride, % weight loss	5.8
Argon, % weight loss	2.4

The information contained herein is believed to be reliable, but no representation, guarantees or warranties of any kind are made to its accuracy or suitability for any purpose. The information presented herein is based on laboratory testing and does not necessarily indicate end product performance. Full scale testing and end product performance are the responsibility of the user.

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