

# Material Profile: Superior® 508

Superior 508 was specifically developed for high temperature applications. Superior 508 offers excellent plasma resistance and minimum particulation in a wide range of plasma environments. It also offers very low trace element contamination in both wet and plasma applications.

#### **Features and Benefits**

- High temperatures capabilities
- Excellent plasma resistance
- Minimum particulation
- High physical properties
- Wide chemical resistance
- Cost-effective

#### **Recommended Dry Processes**

- Deposition: LPCVD, CVD, APCVD, HDPCVD.PECVD. RPCVD, SACVD
- Plasma etch: oxide and metal
- Ashing
- Metalization: PVD, evaporation, sputtering
- Ion Implant
- RTP
- Oxidation
- Diffusion
- Lamp Anneal



White Perfluoroelastomer Service Temperature Range: - 6 to 325° C

#### **Equipment Locations**

- Chamber Lid Seals
- Bell Jar Seals
- Endpoint Windows
- Gas Inlet Seals
- Isolator Valve Seals
- KF Fittings
- Slit Valve Seals
- Valve Seals
- Window Seals

### **Typical Physical Properties**

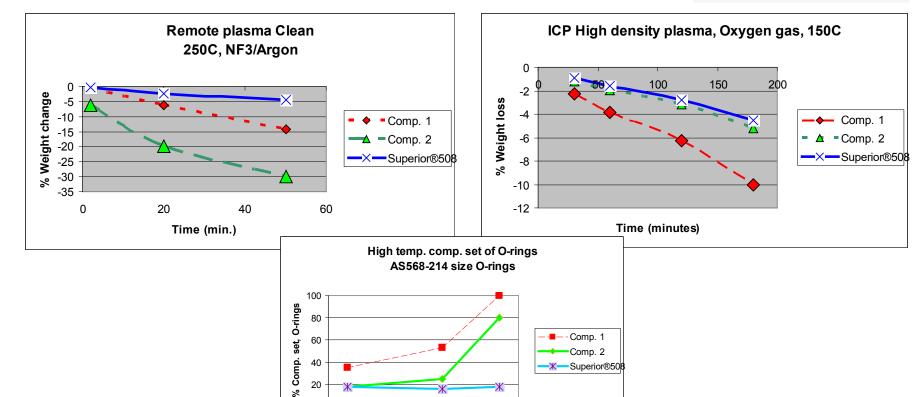
Color	White
Hardness, Shore A	75
Tensile Strength, psi (MPa)	2277 (15.7)
Elongation	246%
Modulus at 100% Elongation,	
psi (MPa)	711 (4.9)
Compression Set: 70 hrs. at 275°C	18%
Service Temperature Range, °C (°F)	-6 to 325 (21 to 617)

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.



## Superior®508





 Superior®508 has the best, overall resistance to ICP direct plasma in Oxygen gas and the Remote Plasma Cleaning process

310

320

300

270

280

290

Temp. of test (C)

 Superior®508 has superior high temperature compression set resistance compared to competitors' flag-ship filled FFKM products

