rxc TECH

SEALING SEMICONDUCTOR PROCESS EQUIPMENT

compound Pure 14

Clean Sealing Material for Semiconductor, Solar, and Bio Tech Applications

- Rxc Technology's compound **Pure 14** is a specially designed material for semiconductor applications.
- **Pure 14** is a special elastomer that does not contain any metal oxides, carbon black, or other impurities normally found in commercial grade materials.
- **Pure 14** is an unique compound formulation that resists particle generation for higher yields and reduced tool maintanence.
- **Pure 14** has seals in a wide range of operating temperatures. Dynamic seals may be held as low as -18° and can withstand temperatures up to 260°C.
- The material is ultra stretchable up to 390% combined with very high tensile strength.
- The broad chemical resistance allows **Pure 14** to be used in a range of plasma chemistries including O_2 and NF_3.

SPECIAL FEATURES

- Ultra Clean, No Metals
- Very Low Out-gassing
- Wide Operating Temperature
- Broad Chemical Resistance
- Designed for Dry Semiconductor Applications
- Very Good Mechanical Properties and Durability in Dynamic Seals/Bellows
- Low Particle Generation

Applications

Orings	Dry Etch Processes
Custom Seals	Ashing Processes
Bonded Gates	All CVD Processes
Bellows	PVD Processes

Pure 14: Typical Physical Properties

Compression Set, Size -214 O-ring, 70 hour @ 204°C	19.4 %
Tensile at Break	18.2 MPa 2640 psi
Elongation	390 %
100% Modulus	3.2 MPa 460 psi
300% Modulus,	11.5 MPa 1675 psi
Durometer, Shore A	75
Color	Light Brown
Minimum Operation Temperature	-18 °C
Maximum Temperature	+260 °C
Special Features	Ultra Clean, No Metals