

**PRODUCT FEATURES
and
SPECIFICATIONS
(ALL *INERTEX*[®] PRODUCTS)**

Operating Parameters

Temperature Range	-450° F to +600° F
Pressure Range	Full vacuum to 3000 PSI
Chemical Compatibility	Fully compatible throughout the pH range of <u>0 to 14!</u> Affected only by elemental Fluorine and molten alkali metals.
Oxygen Service Limits	Oxygen index of 94.5% (PRODUCT MUST BE ORDERED WITHOUT ADHESIVE STRIP) (PTFE will burn in 100% oxygen atmosphere when ignition source is provided)
FDA Suitable	FDA 21CFR 177.1550

Material Properties

- A. Specific Gravity: 0.45 - 0.55 for UHF Joint Sealant; 0.75 - 0.95 for SQ-S Gasket Sheet; compressed to 2.0 - 2.1
- B. Modulus of Elasticity: 50,000 PSI at 73°F
- C. Matrix Tensile Strength: ≤ 6800 PSI
- D. Coefficient of Friction: 0.2 (comparable to wet ice)
- E. Surface Free Energy: 18.5 dynes / cm².
- F. Chemical Compatibility: Inert except with elemental fluorine and alkali metals.
- G. Oxygen Index: 94.5%
- H. Thermal Conductivity: 0.601 BTU-in/hr-ft²-°F @ 75°F
- I. Heat of combustion: 1434 ± 100 cal/g
- J. Specific heat: 0.23 BTU/lb. -°F
- K. Autoignition Temp: 939 ± 100°F
- L. Ignition Temp.: Pa = 75 bar 145°C = 12k, Pe = Approx. 105 bar in condensed oxygen.
- M. Dissociation Pressure: 5 x 10⁻¹⁸ mm Hg at 27°C: 5 x 10⁻¹² mm Hg at 100°C.
- N. PTFE is degraded by high energy radiation; however, there are examples of exposure to 17 megarads of gamma radiation on steel flanges with no loss of seal.
- O. Toxicity: NON-TOXIC
- P. HEALTH HAZARDS: None under normal use and conditions
- Q. WASTE DISPOSAL METHOD: Normal landfill - complies with any local disposal regulations