

DuPont™ Kalrez® 2037

For Semiconductor Applications

Technical Information—Rev. 4, July 2010

Product Description

DuPont™ Kalrez® 2037 perfluoroelastomer parts are a white product that is suitable for use in some plasma and gas deposition applications. It exhibits very low weight loss in oxygen and fluorine-based plasmas and has good mechanical strength properties. A maximum service temperature of 220 °C is suggested. Ultrapure post-cleaning and packaging is optional.

Performance Features/Benefits

- Very low weight loss in oxygen and fluorine-based plasmas
- Good mechanical strength properties
- Good compression set properties
- Good resistance to dry process chemistry

Typical Physical Properties¹

Hardness ² , Shore A	79
100% Modulus ³ , MPa	6.20
Tensile Strength at Break ³ , MPa	16.88
Elongation at Break ³ , %	200
Compression Set ⁴ , % 70 hr at 204 °C, %	27
Maximum Continuous Service Temperature ⁵ , °C	220

¹ Not to be used for specification purposes

² ASTM D2240 (pellet test specimens)

³ ASTM D412 (dumbbell test specimen)

⁴ ASTM 395B (pellet test specimens)

⁵ DuPont proprietary test method

Kalrez® 2037 Compatibility Ratings In Various Plasma Environments

Plasma Environment	Chemical Formula	Compatibility Rating
Argon	Ar	Excellent
Boron Trichloride	BCl ₃	Good
Boron Trifluoride	BF ₃	Excellent
Chlorine	Cl ₂	Excellent
Hexafluoroethane (F-116)	C ₂ F ₆	Good
Hydrogen Bromide	HBr	Excellent
Nitrogen Trifluoride	NF ₃	Good
Oxygen	O ₂	Fair
Silicon Tetrafluoride	SiF ₄	Good
Sulfur Hexafluoride	SF ₆	Good
Tetrafluoromethane (F-14)	CF ₄	Good



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