DuPont Kalrez® 9100

For PECVD/ALD/HDPCVD & Conductor Etch Applications

Technical Information - March, 2017

Product Description

DuPont Kalrez® 9100 is an amber translucent product targeted specifically for PECVD, ALD, HDPCVD and Conductor (Poly/Metal) Etch applications*. Kalrez® 9100 has been specifically designed for low erosion and ultra-low particle generation in harsh plasma environments. It offers excellent thermal stability, very low outgassing as well as excellent elastic recovery and good mechanical strength properties and is well suited for both static and select dynamic sealing applications*. A maximum application temperature of 300°C (572°F) is suggested. Ultrapure post-cleaning and packaging is standard for all Kalrez® 9100 parts.

Features/Benefits

- Low erosion rate and ultra low particle generation in oxygen and fluorine-based plasmas
- Excellent resistance to dry process chemistry
- Excellent thermal stability
- Very low outgassing properties and metals content
- Excellent elastic recovery and low compression set properties

Suggested Applications

- Gas inlet/orifice seals
- Chamber lid seals
- Isolation valve seals
- Select bonded gate valve/slit valve door seals*

Typical Physical Properties*

Color	Amber Translucent
Hardness, Shore A[1] (plied slab)	70
Hardness, Shore M[1] (O-ring)	78
100% Modulus[2], MPa (psi)	5.17 (750)
Tensile Strength at Break[2], MPa (psi)	15.67 (2273)
Elongation at Break[2], %	230
Compression Set[3], %	
70 hr. at 204°C (400°F)	18
70 hr. at 250°C (482°F)	21
70 hr. at 300°C (572°F)	53
Max. Application Temperature[4], °C (°F)	300 (572)

*Typical but not for specification purposes
[1] ASTM D2240 (plied slabs and specimens)
[2] ASTM D1414 (O-ring specimens)
[3] ASTM D412 (plied slabs and specimens)
[4] ASTM D1414 (O-ring specimens)
*DuPont proprietary test method

*Please consult a DuPont Application Engineer on relative performance in for your specific application

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