

DuPont™ Kalrez® 4079

High Temperature Resistance & Mechanical Strength

Technical Information - Rev. 1, July 2019

Product Description

DuPont™ Kalrez® 4079 perfluoroelastomer parts are a low compression set product for general purpose use in O-rings, diaphragms, seals and other parts used in the chemical process and aircraft industries. It is a carbon black filled product with excellent chemical resistance, good mechanical properties, and outstanding hot air aging properties. It exhibits low swell in organic acids, inorganic acids and aldehydes, and has good response to temperature cycling effects. A maximum service temperature of 316°C (600°F) is suggested, with short excursions to higher temperatures possible. Kalrez® 4079 is not recommended for use in hot water/steam applications or in contact with certain hot aliphatic amines, ethylene oxide, or propylene oxide.

Typical Physical Properties¹

Color	Black
Hardness ² , Shore A	75
100% Modulus³, MPa (psi)	7.24 (1050)
Tensile Strength at Break ³ , MPa (psi)	16.88(2450)
Elongation at Break ³ , %	150
Compression Set ⁴ , 70 hr at 204 °C (400 °F), %	14
Maximum Service Temperature⁵, °C (°F)	316 (600)
Lowest Service Temperature ⁵ , °C (°F)	-19 (-2.2)

¹ Not to be used for specification purposes

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² ASTM D2240 (Pellet specimens)

³ ASTM D412 (Dumbbell test specimens)

⁴ ASTM D395B (Pellet specimens)

⁵ DuPont proprietary method; performance will vary with seal design and application specifics