DuPont™ Kalrez® 1050LF

Technical Information — September 2010

Product Description

DuPont™ Kalrez® 1050LF perfluoroelastomer parts are a general purpose product for o-rings, seals, and other parts used in chemical process industries. It has good hot water/steam resistance, excellent amine resistance, and good compression set properties. The maximum suggested service temperature is 288°C (550°F). It is not recommended for use in organic or inorganic acids at high temperatures.

Typical Physical Properties[1]	
Color	Black
Maximum Application Temperature[2], °C (°F)	288 (550)
Maximum Application Pressure[2], MPa (psi)	10.34 (1500)
Durometer, Shore A[3]	82
Durometer, Shore M (o-ring)	
100% Modulus[4], MPa (psi)	12.40 (1800)
Elongation at break[4], %	125
Tensile at break[4], MPa (psi)	18.60 (2700)
Compression set[5], % (70 hours at 204°C (400°F)) Pellet Size 214 O-Ring	35
Specific Gravity, g/cc	2.01

[1]Not to be used for specification

[2]DuPont proprietary test method – maximum application temperature and pressure may vary with seal design and application specifics

[3]ASTM D2240 (pellet test specimen)

[4]ASTM D412, 500mm/min

[5]ASTM D395B

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Additional Physical Properties[1]

Tg[2], °C (°F)	-3.1 (26)
TR-10[3], °C (°F)	-4 (24)
Brittle Point[4], °C (°F)	-41 (-42)
Linear Coefficient of Thermal Expansion, /°C (/°F)	3.45×10^{-4} (1.92×10^{-4})
Abrasion Resistance[5], (volume loss, cubic mm)	127.2
Coefficient of friction[6] (to steel)	
Static	0.542
Dynamic	0.356
Volume resistivity[7], ohms/square	
Surface resistivity[7], Ohm-cm	
Dielectric Constant[8] at 150°C and 1 MHz	5.061
Dissipation Factor[8] at 150°C and 1MHz	0.01828

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[2]DuPont proprietary test method – maximum application temperature and pressure may vary with seal design and application specifics

[3]ASTM D1329

[4]ASTM D746

[5]Din 53 516

[6]ASTM 1894

[7]ASTM D 257

[8]ASTM D150

Visit us at **kalrez.dupont.com** or **vespel.dupont.com**

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