

DuPont™ Kalrez® Spectrum™ 7375

For Oxidizing and Reactive Chemical Environment

Preliminary Product Datasheet - July 2019

Product Description

DuPont™ Kalrez® Spectrum™ 7375 perfluoroelastomer parts are an innovative FFKM product based on a patented crosslinking system for chemical process industry applications where broad chemical and water/steam resistance are needed at elevated temperatures. Kalrez® Spectrum™ 7375 parts exhibit excellent compression set resistance, outstanding physical property retention, and good mechanical strength properties. A maximum application temperature of 300 °C is suggested.

TABLE 1: Typical Physical Properties¹

Color	Black
Hardness, Shore A ²	79
100% Modulus ³ , MPa (psi)	10.2 (1473)
Tensile Strength at Break ³ , MPa (psi)	16.9 (2447)
Elongation at Break ³ , %	128
Compression Set ⁴ , %, 70 hrs. at 204 °C (400 °F)	9
Compression Set ⁴ , %, 70 hrs. at 260 °C (500 °F)	15
Maximum Application Temperature ⁵ , °C (°F)	300 (572)

¹ Not to be used for specification purposes

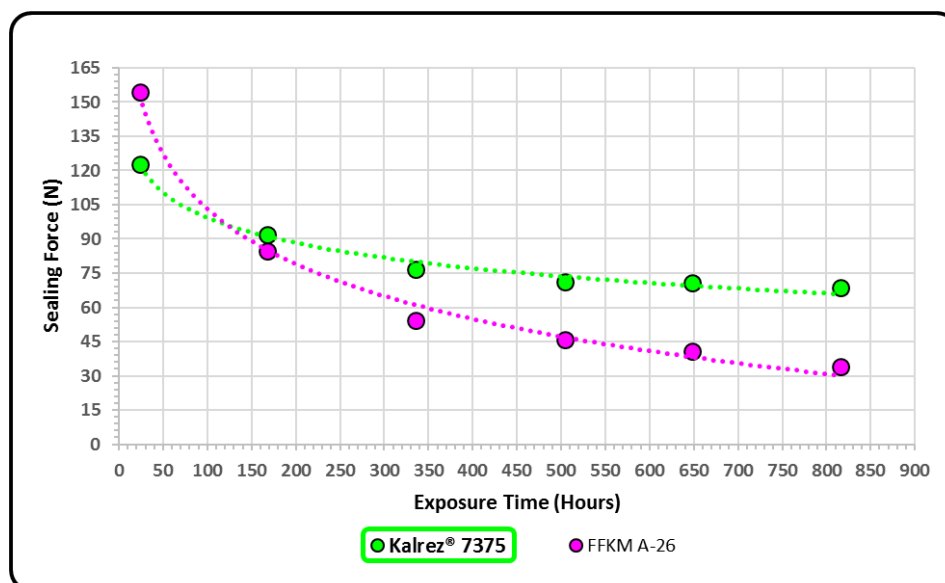
² ASTM D2240 (plied slab test specimens)

³ ASTM D412 (dumbbell test specimens)

⁴ ASTM D395B & D1414 (AS568 K214 O-ring test specimens)

⁵ DuPont proprietary test method

Compression Stress Relaxation (CSR) in Water⁶ at 225 °C (437 °F), measured at 90 °C (194 °F)



⁶ O-rings tested by compression stress relaxation per SAE J2979 at 20% compression; Tuckner, Paul, Grace Technology and Development

TABLE 2: Volume Change (%)⁷ comparison between different FFKMs after chemical immersion for 672 Hours. Volume swell is a good predictor of performance and low values typically translate to compatibility in the chemical environment.

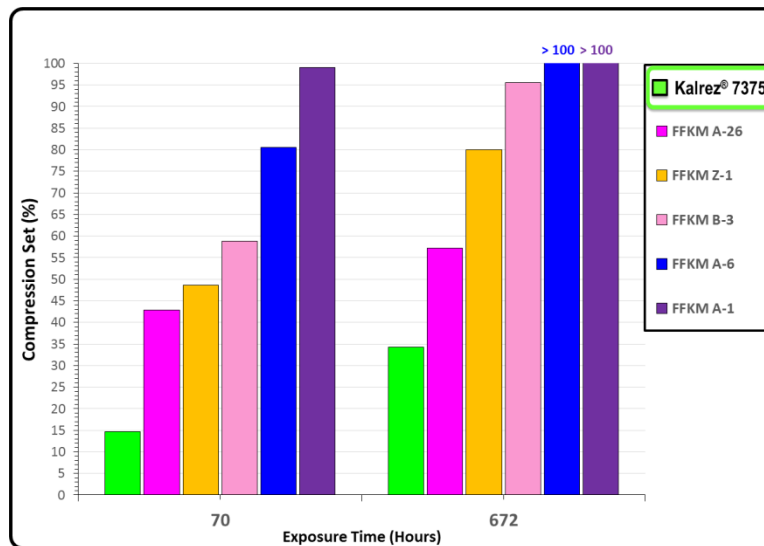
Chemical	Temp. °C (°F)	Kalrez [®] Spectrum™73 75	FFKM Z-1	FFKM A-1	FFKM A-26	FFKM B-3
Steam	225(437)	A	C	N/A	A	C
Nitric Acid 70%	85(185)	A	C	C	B	C
Sulfuric Acid 98%	150(302)	A	A	C	A	A
Butyraldehyde	70(158)	A	C	B	B	N/A
Maleic Anhydride	100(212)	A	B	N/A	A	A
Ammonium Hydroxide	100(212)	B	B	A	A	A

Rating system: A: 0–10% volume swell, B: 11–20% volume swell, C: >20% volume swell

N/A = Test Data Not Available.

⁷ ASTM D471 (AS568 K214 O-ring test specimens)

Long-Term Compression Set in Hot Air^{4,8} at 260 °C (500 °F)



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