

DuPont™ Kalrez® Spectrum™ 7275

For Aggressive Chemical Environments

Preliminary Product Datasheet - October 2016

Product Description

DuPont™ Kalrez® Spectrum™ 7275 parts are a light brown product based on a proprietary crosslinking system targeted specifically for the chemical processing industry. It exhibits minimal swelling and improved retention of physical properties when exposed to aggressive chemicals, e.g., concentrated nitric acid, organosilanes, chlorosilanes, pure ethylene oxide, butyraldehyde, amines and vinyl and acrylic monomers. It also has excellent compression set resistance and good retention of physical properties after aging at high temperatures. A maximum application temperature of 300°C is suggested.

TABLE 1: Typical Physical Properties¹

Color	Light Brown
Hardness, Shore A (Slab) ²	75
Hardness, Shore M (O-ring) ³	81
100% Modulus ⁴ , MPa (psi)	9.7 (1407)
Tensile Strength at Break ⁴ , MPa (psi)	14.5 (2103)
Elongation at Break ⁴ , %	160
Compression Set ⁵ , %, 70 hrs. at 204°C (400°F)	22
Maximum Application Temperature ⁶ , °C (°F)	300 (572)

¹ Not to be used for specification purposes

² ASTM D2240 (plied slab test specimens)

³ ASTM D2240 & D1414 (AS568 K214 O-ring test specimens)

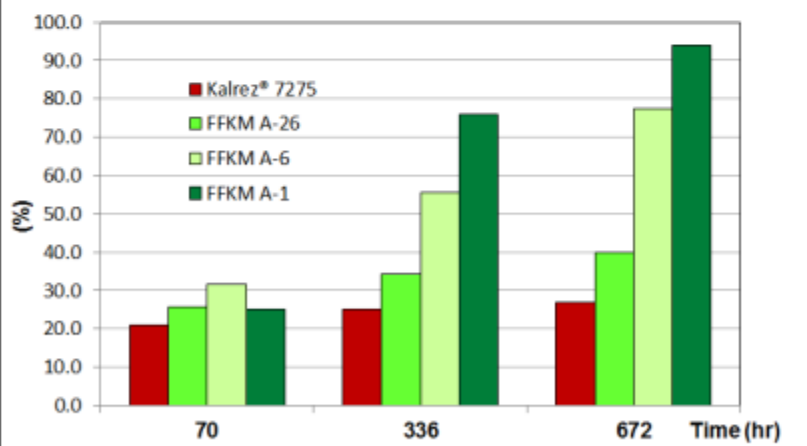
⁴ ASTM D412 (dumbbell test specimens)

⁵ ASTM D395B & D1414 (AS568 K214 O-ring test specimens)

⁶ DuPont proprietary test method



Compression Set at 204 °C (ASTM D395 / D1414 - Method B)



The miracles of science™

AUTHORIZED DISTRIBUTOR

DuPont™ Kalrez®
PERFLUOROELASTOMER PARTS

DU PONT

"Ask for the Seal You Can Trust"

VARISCO & CO

TABLE 2: Weight % Change⁷ Comparison Between Different FFKMs After Chemical Immersion. Low levels of weight gain/volume swell typically have good correlation with elastomer compatibility and seal functionality.

Chemical	Temperature °C (°F)	Immersion Time (hrs.)	Kalrez® Spectrum™ 7275	FFKM 1	FFKM 2
Ethylene Oxide (100 %)	31 (88)	1344	0.6	1.5	1.0
Ethylene Oxide (100 %)	50 (122)	672	2.2	3.2	5.6
Ethylene Oxide (100 %)	93 (200)	672	1.8	8.7	18.3
Acrylic Acid (100 %)	100 (212)	672	1.4	2.5	N/A
Styrene (100 %)	67 (153)	1600	1.4	>20 %	>20%
Acetic Acid (100 %)	100 (212)	672	1.9	2.7	5.2
Ethylenediamine (98 %)	90 (194)	672	3.1	3.5	9.6
Nitric Acid (70 %)	85 (185)	672	1.5	4.7	10.6
Butyraldehyde (100 %)	70 (158)	672	1.7	2.5	2.9
Sulfuric Acid (98 %)	150 (302)	672	1.4	8.9	7.7
Toluene (100 %)	100 (212)	672	2.4	2.7	N/A
Syltherm™ 800	270 (518)	168	0.6	N/A	N/A
Chlorosilanes (Mixture)	70 (158)	768	2.3	8.9	7.5

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

N/A = Test Data Not Available

Visit us at kalrez.dupont.com

Contact DuPont at the following regional locations:

North America
800-222-8377

Latin America
+0800 17 17 15

Europe, Middle East, Africa
+41 22 717 51 11

Greater China
+86-400-8851-888

ASEAN
+65-6586-3688

Japan
+81-3-5521-8600

The information provided in this data sheet corresponds to our knowledge on the subject at the date of its publication. This information may be subject to revision as new knowledge and experience becomes available. The data provided fall within the normal range of product properties and relate only to the specific material designated; these data may not be valid for such material used in combination with any other materials, additives or pigments or in any process, unless expressly indicated otherwise. The data provided should not be used to establish specification limits or used alone as the basis of design; they are not intended to substitute for any testing you may need to conduct to determine for yourself the suitability of a specific material for your particular purposes. Since DuPont cannot anticipate all variations in actual end-use and disposal conditions, DuPont does not guarantee favorable results, makes no warranties and assumes no liability in connection with any use of this information. All such information is given and accepted at the buyer's risk. It is intended for use by persons having technical skill, at their own discretion and risk. Nothing in this publication is to be considered as a license to operate under or a recommendation to infringe any patent. DuPont advises you to seek independent counsel for a freedom to practice opinion on the intended application or end-use of our products.

CAUTION: Do not use DuPont materials in medical applications involving implantation in the human body or contact with internal body fluids or tissues unless the material has been provided from DuPont under a written contract that is consistent with DuPont policy regarding medical applications and expressly acknowledges the contemplated use. For further information, please contact your DuPont representative. You may also request a copy of DuPont POLICY Regarding Medical Applications H-50103-5 and DuPont CAUTION Regarding Medical Applications H-50102-5.

Copyright © DuPont. The DuPont Oval Logo, DuPont™, The miracles of science™ and Kalrez® are trademarks or registered trademarks of E.I. du Pont de Nemours and Company or its affiliates. All rights reserved.

(09/16) Reference No. K2E-A40020-00-B1016



The miracles of science™

AUTHORIZED DISTRIBUTOR

DuPont™ Kalrez®
PERFLUOROELASTOMER PARTS

"Ask for the Seal You Can Trust"

VARISCO & CO