

DuPont™ Kalrez® Spectrum™ 7275

For Oxidizing and Reactive Chemical Environment

Preliminary Product Datasheet - July 2019

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, chlorosiloxanes, 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 service temperature of 300 °C is suggested.

Typical Physical Properties¹

Color	Light Brown
Hardness ² , Shore A	75
100% Modulus ³ , MPa (psi)	9.70 (1407)
Tensile Strength at Break ³ , MPa (psi)	14.50 (2103)
Elongation at Break ³ , %	160
Compression Set ⁴ , %, 70 hrs. at 204 °C (400 °F)	22
Maximum Service Temperature ⁵ , °C (°F)	300 (572)
Lowest Service Temperature ⁵ , °C (°F)	-20(-4)

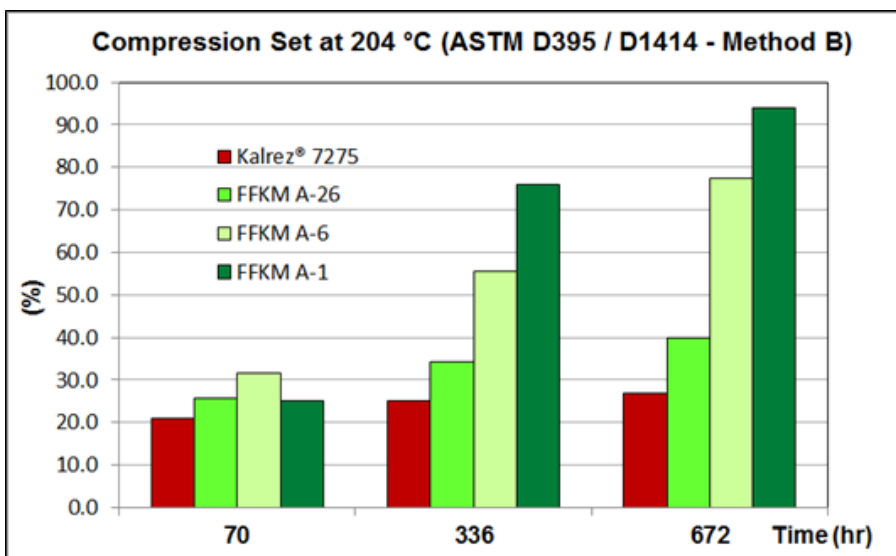
¹ Not to be used for specification purposes

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; performance will vary with seal design and application specifics



Weight % Change⁶ 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

⁶ ASTM D471 (AS568 K214 O-ring test specimens)

N/A = Test Data Not Available

Visit us at kalrez.com

dupont.com



The information set forth herein is furnished free of charge, is based on technical data that DuPont believes to be reliable, and represents typical values that fall within the normal range of properties. This information relates only to the specific material designated and may not be valid for such material used in combination with other materials or in other processes. It is intended for use by persons having technical skill, at their own discretion and risk. This information should not be used to establish specification limits nor used alone as the basis of design. Handling precaution information is given with the understanding that those using it will satisfy themselves that their particular conditions of use present no health or safety hazards and comply with applicable law. Since conditions of product use and disposal are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information. As with any product, evaluation under end-use conditions prior to specification is essential. Nothing herein is to be taken as a license to operate or a recommendation to infringe on patents.

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 the DuPont policy regarding medical applications and expressly acknowledges the contemplated use. For further information, please contact your DuPont representative.

DuPont's sole warranty is that our products will meet our standard sales specifications in effect at the time of shipment. Your exclusive remedy for breach of such warranty is limited to refund of purchase price or replacement of any product shown to be other than as warranted. TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, DUPONT SPECIFICALLY DISCLAIMS ANY OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, MERCHANTABILITY, OR NON-INFRINGEMENT. DUPONT DISCLAIMS LIABILITY FOR ANY SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES.

DuPont™, the DuPont Oval Logo, and all trademarks and service marks denoted with ™, ® or ® are owned by affiliates of DuPont de Nemours, Inc. unless otherwise noted.