

## Technical Information

Rev. 3, June 2007



**Kalrez**<sup>®</sup> perfluoroelastomer  
parts

From DuPont Performance Elastomers

# Kalrez<sup>®</sup> 2037 for Semiconductor Applications

## Product Description

Kalrez<sup>®</sup> 2037 is a white product that is suitable for use in some plasma and gas deposition applications. It exhibits very low weight loss in oxygen and fluorine-based plasmas and has good mechanical strength properties. A maximum service temperature of 220°C is suggested. Ultrapure post-cleaning and packaging is optional.

## Performance Features/Benefits

- Very low weight loss in oxygen and fluorine-based plasmas
- Good mechanical strength properties
- Good compression set properties
- Good resistance to dry process chemistry

## Typical Physical Properties<sup>1</sup>

Hardness <sup>2</sup> , Shore A	79
100% Modulus <sup>3</sup> , MPa	6.20
Tensile Strength at Break <sup>3</sup> , MPa	16.88
Elongation at Break <sup>3</sup> , %	200
Compression Set <sup>4</sup> , % 70 hr at 204°C, %	27
Maximum Continuous Service Temperature <sup>5</sup> , °C	220

<sup>1</sup>Not to be used for specification purposes

<sup>2</sup>ASTM D2240 (pellet test specimens)

<sup>3</sup>ASTM D412 (dumbbell test specimen)

<sup>4</sup>ASTM 395B (pellet test specimens)

<sup>5</sup>DuPont Performance Elastomers proprietary test method

## Kalrez<sup>®</sup> 2037 Compatibility Ratings In Various Plasma Environments

Plasma Environment	Chemical Formula	Compatibility Rating
Argon	Ar	Excellent
Boron Trichloride	BCl <sub>3</sub>	Good
Boron Trifluoride	BF <sub>3</sub>	Excellent
Chlorine	Cl <sub>2</sub>	Excellent
Hexafluoroethane (F-116)	C <sub>2</sub> F <sub>6</sub>	Good
Hydrogen Bromide	HBr	Excellent
Nitrogen Trifluoride	NF <sub>3</sub>	Good
Oxygen	O <sub>2</sub>	Fair
Silicon Tetrafluoride	SiF <sub>4</sub>	Good
Sulfur Hexafluoride	SF <sub>6</sub>	Good
Tetrafluoromethane (F-14)	CF <sub>4</sub>	Good

---

For further information please contact one of the offices below, or visit our website at [www.dupontelastomers.com/kalrez](http://www.dupontelastomers.com/kalrez)

**Global Headquarters – Wilmington, DE USA**

Tel. +1-800-853-5515  
+1-302-792-4000  
Fax +1-302-792-4450

**European Headquarters - Geneva**

Tel. +41-22-717-4000  
Fax +41-22-717-4001

**South & Central America Headquarters - Brazil**

Tel. +55-11-4166-8978  
Fax +55-11-4166-8989

**Asia Pacific Headquarters - Singapore**

Tel. +65-6275-9383  
Fax +65-6275-9395

**Japan Headquarters – Tokyo**

Tel. +81-3-5521-2990  
Fax. +81-3-5521-2991

---

The information set forth herein is furnished free of charge and is based on technical data that DuPont Performance Elastomers believes to be reliable. It is intended for use by persons having technical skill, at their own discretion and risk. 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. 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 material, evaluation of any compound 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 in medical applications involving permanent implantation in the human body. For other medical applications, discuss with your DuPont Performance Elastomers customer service representative and read Medical Caution Statement H-69237.

DuPont is a trademark of DuPont and its affiliates.

Kalrez<sup>®</sup> is a registered trademark of DuPont Performance Elastomers.  
Copyright © 2004, 2005 DuPont Performance Elastomers. All Rights Reserved.

(06/05) Printed in U.S.A.

Reorder no: KZE-A10062-00-C0607

DuPont  
Performance Elastomers

