



# Kalrez® perfluoroelastomer parts

From DuPont Performance Elastomers

## Kalrez® Spectrum™ 6380

### General Description

Kalrez® Spectrum™ 6380 is a non-black product specifically developed for chemical processes involving hot, aggressive amines; in addition it has excellent overall chemical resistance (see chart below). This cream colored product is easily identifiable when selecting an o-ring material for harsh chemical plant services. This material has excellent mechanical properties and is a top choice for both static and dynamic sealing applications. A maximum continuous service temperature of 225°C is suggested while short-term excursions to higher temperatures are permissible.

For more information on this compound, or to see if it might be right for your difficult sealing applications in amines and other aggressive chemical streams, please contact DuPont Performance Elastomers.

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

Hardness <sup>2</sup> , Shore A ±5	80
100% Modulus <sup>3</sup> , MPa (psi)	6.89 (1000)
Tensile Strength at Break <sup>3</sup> , MPa (psi)	15.86 (2300)
Elongation at Break, %	160
Compression Set <sup>4</sup> , 70 hr at 204°C, %	40

<sup>1</sup> Not to be used for specifications

<sup>2</sup> ASTM D2240

<sup>3</sup> ASTM D412, 500 mm/min (20 in/min)

<sup>4</sup> ASTM D395 B, size 214 o-ring

### Chemical Resistance (672 hour exposure)

Material Compound	Temperature °C	6380 Rating
<i>Chemical Resistance to:</i>	<i>Temperature °C</i>	<i>Rating</i>
Acetic Acid	100	A
Nitric acid (fuming)	60	A
Diethyl amine	50	A
Monoethanolamine	150	B
Ethylene diamine	90	A
Ethylene Oxide/water mix (40/60)	93	A
Butyraldehyde	70	A
Methanol	100	A
Toluene	100	A
Water	225	A

Rating: A: < 10% volume change and minimal effect on elastomers properties  
 B: 10-20% volume increase and slight effect on elastomer properties  
 C: > 20% volume increase and significant effect on elastomer properties  
 X: Elastomer not recommended for this service

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

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**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.

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