

Performance Information

DuPont™ Kalrez® perfluoroelastomer parts last longer and seal more effectively than other elastomers due to their exceptional **chemical resistance**. Kalrez® parts can withstand attack by more than 1,800 chemicals, including many acids and amines that cause other elastomers to fail due to excessive swelling. Kalrez® parts have exceptional **heat resistance** even after long-term exposure to temperatures up to 327°C. Kalrez® retains its elasticity and recovery properties better than other high-temperature elastomers. There are many Kalrez® products developed for specific processing environments.

For more information on the performance of specific compounds please refer to datasheets or review compounds suggested in market **literature** or, you may request a downloadable copy of the **Kalrez® Application Guide** or see the **General Chemical Resistance Guide**.

Chemical Resistance Properties

	Neoprene	Ethylene propylene	Buna-N nitrile	Fluoro-silicone	Fluoro-elastomer	Perfluoro-elastomer
ASTM Code	CR	EPM	NBR	FVMQ	FKM (Viton®)	FFKM (Kalrez®)
Hardness durometer (Shore A)	20 to 90	40 to 80	40 to 95	40 to 80	55 to 95	65 to 95
Tensile strength (lb/in ²)	3,000	2,500	2,500	900	2,500	2,000
Wear resistance	G	G	G	N	G	G
Fireproof hydraulic fluids	R	VG	N	VG	R	E
Lubricating oils	G	N	G	E	E	E
Fuel oils	R	N	G	E	E	E
Hydraulic oils	G	N	E	E	E	E
Vegetable Oils	G	R	E	E	E	E
Animal Fats	G	R	E	E	E	E
Petrol (normal)	R	N	VG	E	E	E
Petrol (high-octane)	N	N	G	E	E	E
Kerosene	R	N	VG	E	E	E
Aromatic hydrocarbons	N	N	R	VG	E	E
Aliphatic hydrocarbons	G	N	VG	E	E	E
Water (under 80°C)	R	E	VG	E	E	E

Water (above 80°C)	N	E	R	E	E	E
Alcohols	E	E	VG	E	E	E
Ketones	N	G	N	N	N	E
Concentrated acids	N	R	N	G	VG	E
Diluted acids	G	G	R	VG	E	E
Alkalis	G	VG	R	R	N	E
Halogenated solvents	N	N	R	VG	VG	VG
Max. temp. at continuous service	105°C	135°C	135°C	200°C	204°C	327°C
Compression set	VG	G	VG	G	VG	G
Flame-resistant	yes	no	no	no	yes	yes

E = Excellent, VG= Very Good, G= Good, R = Reasonable, N = Not recommended.

Data has been drawn from DuPont and industry sources. Data is presented for use only as a general guide and should not be the basis for design decisions.