

Perfluoroelastomer Compound for General Purposes Applications

Technical information

Chemical Resistant FFKM

Typical Physical Properties	FC750B
Hardness ^a , Shore A	75
Color	Black
100 % Modulus ^b , MPa	10
Tensile Strength at Break ^b , MPa	17.5
Elongation at Break ^b , %	177
Compression Set (% , 70hr@200 °C) ^c	17
Max. Continuous Service Temp. ^d °C	250
Min. Service Temp. ^d °C	-30
Specific Gravity ^e , g/cc	2.015

Equivalent to Kalrez® 6375, Chemraz® 505

^a ASTM D2240 (pellet test specimen)

^b ASTM D412 & D1414 (dumbbell test specimen)

^c ASTM D395B (AS568 214 O-ring test specimen)

^d Fluorez® proprietary test method

^e ASTM D792 (AS568 214 O-ring test specimen)

Fluorez® FC750B is a general-purpose FFKM material that offers broad chemical resistance, including challenges from hot steam and hot amines in a variety of applications.

It has a working temperature range of -30°C to 250°C, and is the most popular and economical choice for the chemical processing, petroleum refining, and semiconductor (semicon) industries.

FC750B features a relatively low compression set, which provides an extended service life in most applications.

The material is available in multiple shapes, including o-rings, gaskets, slabs, and many other customized shapes. It is also ideal for metal bonding solutions with stainless steel and aluminum.

Ultrapure post-cleaning and packaging processes are applied to all Fluorez® FC750B compounds and parts.

Suggested Applications:

Chemical and Petroleum industries:

- Variety of acid and alkine equipments
- Mechanical seals
- Valves
- Pump housings
- Reactors
- Mixers
- Compressors
- Painting and ink injector
- Spraying head and dispensors
- Connectors
- Controlling instruments

Aerospace

- Static sealing

Semiconductor

- CVD
- Wet Etching

Customized parts

- Slabs
- Plugs
- Gaskets
- Vulcanized endless o-ring
- Metal bounded parts

Additional Technical Information

Low Temperature Test

	ASTM	Value
TR-10 °C	D1329	-2
Brittle point °C	D746	-30

Chemical Compatibility

Chemical		Condition		FC750B
		Temp (°C)	Time (hr)	Rating
Acids	Glacial Acetic Acid	100	168	A
	Hydrochloric Acid (37%)	80	168	A
	Nitric Acid (65%)	85	168	A
	Sulfuric Acid (98%)	175	672	A
Amines	Ethanolamine (MEA)	150	72	A
	Ethylene Diamine	100	168	A
	Triethanolamine	23	168	A
Aldehyde	Butyraldehyde	70	168	A
Bases	Ammonia (30%)	100	672	A
	NaOH (50%)	150	168	A
Esters	Ethylacetate	23	168	A
	Methyl Tert-Butyl Ether (MTBE)	23	168	A
Gases	Ethylene Oxide	50	168	A
	Propylene Oxide	50	168	A
Hydrocarbons	Toluene	40	168	A
	Trichloroethylene	40	168	A
Ketones	Acetone	40	720	A
	Methyl Ethyl Ketone (MEK)	40	720	A
Steam (5 bar)		152	2000	A
Water		225	672	A

Rating: A = volume swelling (0-10%). B = volume swelling (10-20%). C = volume change (>20%)