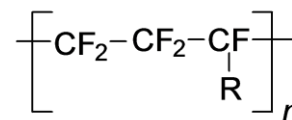


High Temperature, ED Resistant Perfluoroelastomer (FFKM 90A)

SPECIFICATIONS

Property	Spec	Value
Hardness	ASTM D 2240	90A ± 5
Specific Gravity	ASTM D 1817	2.00g/cm ³ ± 0.03
Heat Resistance 275C; 70hrs	ASTM D 573	
Change in Hardness		+1.5pts
Change in Tensile Strength		-10%
Change in Ultimate Elongation		+16%
Fluid Water/Glycol(50/50); 150C; 168hrs	ASTM D 471	
Change in Hardness		-1pts
Change in Volume		+1.5%
Fluid MEK; 40C; 168hrs	ASTM D 471	
Change in Hardness		-3pts
Change in Volume		+5%
Fluid Steam; 200C; 168hrs	ASTM D 471	
Change in Hardness		-4pts
Change in Volume		+3.2%
Temperature		-15°Cmin
		+320°Cmax
Color		Black



DESCRIPTION

MF94 is a FFKM material with hardness 90A, specially compounded for high temperature, ED Resistant applications. FFKM is referred to as perfluoroelastomers, in which ALL hydrogen atoms are replaced by fluorine atoms in the polymer. FFKM has better fluid resistance and base resistance at much higher temperatures than FKM. Raw materials for producing FFKM are very expensive. For this reason, FFKM is considered to be a high cost specialty elastomer. The major FFKM trade names are Kalrez and Technoflon. In order to take advantage of high temperature resistance from FFKM, all other ingredients, especially fillers and cure systems in the formulations have to withstand the temperature at least as much FFKM. The mechanical property loss and thermal expansion of FFKM needs to be carefully considered if seals are used over a wide temperature cycle. FFKM is usually used in stringent applications that other elastomers are unable to match. Typical application environments are hydrocarbon liquids and gases, water and steam, solvents, amines, brake fluids, many acids and alkalis, air or ozone. FFKM is not suited for molten and gaseous metals such as sodium or potassium, nor fluorinated solvents or refrigerants, nor chlorine compounds. FFKM is not suited for steam over 150°C.