UTEX INDUSTRIES, INC.
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PRODUCT BULLETIN

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CHEMTEX® II PFP HIGH PERFORMANCE PERFLUOROPOLYETHER ELASTOMER (PFP)

CHEMTEX® II PFP is the next generation of perfluoroelastomer technologies from Utex Industries, Inc. CHEMTEX II PFP is a unique elastomer system composed of a perfluoropolyether and a silicone to produce a perfluoroelastomer with exceptional chemical resistance similar to CHEMTEX I PFR but also with exceptional low temperature properties at an economical cost. CHEMTEX II PFP is alloyed for temperature capabilities from -58°F to +392°F, -50°C to +200°C with good dynamic properties.

CHEMTEX II PFP is currently available as a nominal 75 durometer compound 7907, UPS 0393.

CHEMTEX II PFP is available in standard AN series o-rings, style 0566–51 and in custom molded articles and specialty shapes as style 0020.

Below are the typical properties of CHEMTEX II PFP available compounds and a general comparison of chemical compatibility. UTEX Engineering Document EIS-018 provides a comparison of HTCR, CHEMTEX I PFR and CHEMTEX II PFP over a much broader range of chemicals.

TYPICAL PROPERTIES OF CHEMTEX® II COMPOUNDS

Compound No.	**7907**	**79085**
Hardness (A)	70±5	85±5
S.G.	1.91	1.85
Tensile Strength (psi)	975	950
E/B (%)	175	75
Modulus 50% (psi)	325	675
Modulus 100% (psi)	575	- -
Tear (ppi)	110	100
Compression Set ASTM 395 B		
22 Hours @ 392°F with button	20	25

GENERAL CHEMICAL RESISTANCE COMPARISON OF HTCR, FKM and CHEMTEX

	HTCR	FKM	CHEMTEX I PFR	CHEMTEX II PFP
High Temperature Steam/Hot Water	+	—	++	++
Caustics/High pH Fluids	+	—	++	++
Inorganic Acids	+	—	++	++
Phosphate Ester Hydraulic Fluid	+	+	++	N/A
Alcohols	+	—	++	++
Hydrocarbon Based Hydraulic Fluid	+	+	++	++
Water Glycol Hydraulic Fluid	+	—	++	++
Glycol Based Brake Fluids	+	+	++	++
Mineral or Silicon Oil Brake Fluids	+	—	++	+
Engine Oils (New Types)	+	—	++	++
Automatic Transmission Fluid (New Types)	+	—	++	++
Engine Coolants with Rust Inhibitors	+	—	++	++
Power Steering Fluid (New Types)	+	—	++	++
Sour (H2S) Oil and Gas	+	—	++	++
Amine Corrosion Inhibitors	+	—	++	++
Gasoline	—	+	++	++
EP Gear Lubricants	+	—	++	++
Gamma Ray Radiation	++	—	+	N/A
Polar Solvents	—	—	++	++
Non-Polar Solvents	+	—	++	++
Oxidizing Agents	—	—	++	++
High Aromatics (i.e., Toluene, Xylene)	—	+	++	++
Jet Turbine Oils	+	—	++	++
Pulp and Paper Liquors	+	—	++	++

"++" IS BEST "+" IS BETTER PERFORMANCE THAN " - "

COMPARISON OF O-RING COMPRESSION SETS (.139 c/s)

	Kalrez® *DuPont 1050LF*	***Chemraz®*** *Greene Tweed CPD 505*	***ChemTex® I*** *Utex 7807*	***ChemTex® II*** *Utex 7907*
22 Hours @ 392°F	28.57	8.33	9.09	20