



O-Rings: Resistance Properties Of Various Elastomers

E = Excelent; V = Very Good; R = Reasonable; N = Not Reasonable; U = Unsuitable

Please Note: This chart should only be used as a guide. Final selection should be based on functional evaluations or experience under actual end use conditions.

	Buna -N Nitrile	Ethylene Propylene	Neoprene	Urethane	Silicone	Fluro-Silicone	Fluro-Elastomer Viton	Poly-Acrylate	Kalrez/Zalac Perfluor-Elastomer	Teflex
ASTM Code 1992	NBR	EPDM	CR	AU	VMQ	FVMQ	FKM	AC	FFKM	FEP
ISO Code 1987	NBR	EPM	CR	EU	VMQ	FVMQ	FPM	ACM	FPM	FEP
Hardness Shore A	40-95	40-80	20-90	50-90	10-90	40-80	60-90	50-90	80-90	80-90
Tensile Strength (psi)	2500	2500	3000	5000	1400	900	2000	2000	2000	
Tearing Strength	G	G	V	EU	N	N	G	G	G	G
Wear Resistance	G	G	G	V	N	N	G	V	G	G
Fire-Proof Hyd. Fluids	N	V	R	N	G	V	R-N	N	E	E
Lubricating Oils	G	N	G	V	G	E	E	V	E	E
Fuel Oils	G	N	G	V	R	E	E	V	E	E
Hydraulic Oils	E	N	G	V	G	E	E	U	E	E
Vegetable Oils	E	R	G	V	G	E	E	U	E	E
Animal Fats	E	R	G	V	G	E	E	U	E	E
Petrol (Normal)	V	N	R	V	R	E	E	V	E	E
Petrol (High Octane)	G	N	N	V	N	E	E	G	E	E
Kerosene	V	N	R	V	R	E	E	V	E	E
Aromatic Hydrocarbons	R	N	N	G	N	E	E	R	E	E
Aliphatic Hydrocarbons	V	N	G	V	R	E	E	V	E	E
Water (< 80°C)	V	E	R	R-N	E	E	E	N	E	E
Water (> 80°C)	R	E	N	N	E	V	G	N	E	E
Alcohols	V	E	N	N	E	V	G	N	E	E
Ketones	N	G	N	N	G	N	N	N	E	E
Concentrated Acids	N	R	N	N	R	G	V	N	E	E
Diluted Acids	R	G	G	N	G	V	E	N	E	E
Alkalis	R	V	G	N	G	R	G	N	E	E
Chlorinated Solvents	R	N	N	R-N	N	E	E	R	E	E
Ozone & Sunlight	R	E	V	V	E	E	E	V	E	E
Max Temp at Continuous Service	110°C	135°C	105°C	80°C	230°C	205°C	205°C	175°C	250°C - 316°C	204°C - 316°C
Electrical Properties	N	E	V	G	E	E	E	N	E	E
Compression Set	V	G	V	N	E	V	R	G	G	G
Flame Resistant	No	No	Yes	No	No	No	Yes	No	Yes	Yes

Please note : errors and omissions excepted.