COMPATABILITY OF ELASTOMERS

R – RECOMMENDED A – ACCEPTABLE N - NOT RECOMMENDED

	Natural Rubber	Neoprene	Nitrile	Butyl	EPDM	Flouro Carbon	Silicone	Acrylic	Urethane	Flouro Silicone	SBR	Thiokol	Butadiene
Air or Oxygen	N	A	A	R	A	R	R	R	R	R	N	R	A
Dilute Acid	R	R	A	R	R	R	N	N	N	A	R	R	A
Dilute Alkali	R	R	A	R	R	A	N	N	N	A	R	R	A
Water	R	A	R	R	R	A	R	N	N	R	R	R	R
Lower Alcohols	R	R	R	R	R	R	N	N	N	R	R	R	R
Commercial Petrols	N	N	A	N	N	R	N	A	A	A	N	R	N
Fuel and Diesel Oils	N	N	R	N	N	R	N	R	A	A	N	R	N
HEAT TRANSFER FLUIDS:													
(a) Mineral Based	N	R	N	N	N	R	N	R	R	R	N	A	N
(b) Synthetic Based	N	N	N	N	N	R	N	N	N	A	N	A	N
HYDRAULIC FLUIDS:													
(a) Mineral oils	N	N	R	N	N	R	N	R	R	A	N	A	N
(b) Esters (non-flammable)	N	N	N	A	A	R	A	N	N	N	N	A	N
(c) Water Glycol	N	N	R	R	R	A	A	N	N	N	N	A	N
(d) Synthetic	N	N	A	N	N	N	N	N	N	A	N	A	N
(e) Silicone	N	N	A	N	N	A	N	N	N	N	N	N	N
(f) Glycol-ether brake fluids, vegetable oils	R	A	N	A	R	N	N	N	N	N	R	N	R

ELASTOMER COMPARISON CHART 1 -MOST RESISTANCE, 5 -LEAST RESISTANCE

Common Trade Name	Chemical Designation	Resistance to							
		Heat	Oil	Ketonel Ester	Ozone	Low Temp	Abrasion	Flame	Gas
Natural	Natural Polyisoprene	5	5	3	5	4	2	5	4
Synthetic Natural	Synthetic Polyisoprene	5	5	3	5	4	2	5	4
Neoprene®	Chloroprene	4	3	5	3	4	2	1	2
SBR	Styrene-Butadiene	5	5	3	5	4	3	5	3
NBR (Nitrite)	Acrylonitrile Butadiene	4	2	4	4	4	3	5	3
Butyl	Isobutylene Isoprene	3	4	2	2	4	2	5	1
Chlorobutyl	Chloroisobutylene Isoprene	3	4	2	2	4	3	4	1
Butadiene	Polybutadiene Stereo-specific	5	4	3	5	4	2	5	3
Thiokol®	Polyalkylenesultide	4	1	1	2	4	4	5	2
EPR	Ethylene-Propylene	2	5	2	1	3	3	5	3
EPDM	Ethylene- Propylenediene	3	5	2	1	3	2	5	3
Hypalon®	Chlorosulfonated Polyethylene	3	2	4	2	4	3	2	1
Silicone	Polydimethylsiloxane	2	5	4	1	1	5	5	5
Urethane	Polyester Urethanes	5	2	3	2	2	1	4	3
Viton®	Fluorinated Hydrocarbon	1	2	5	2	5	3	2	2
Acrylics	Polyacrylate	2	3	5	5	5	3	5	3
Hydrin®	Epichlorohydrin	3	1	3	1	2	2	4	1

FINAL DETERMINATION OF SUITABILITY OF ANY MATERIAL IS THE SOLE RESPONSIBILITY OF THE USER

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