

### Simplified Guide to Seal and Hose Compatibility with Fluids by Henry Sheil

	SEAL MATERIALS														HOSES						
	NBR	HNBR	EPDM	FKM	Hifluor FKM	FFKM	FEPM	Neoprene	SBR	Polyacrylate	Polyurethane	Butyl	Isoprene	Natural Rubber	Hypalon	Fluorosilicone	Silicone	Polyester	Nylon	PVC	PTFE
Air (<90C)			1	1	1	1	1	1	1	1	1	1			1	1	1	G	G	G	G
ATF (Dexron)	1	1		1	1	1				1						X					
Brake Fluid (DOT3)			1		1	1				1									G		G
Castor Oil	1	1		1	1	1	1	1	1	1	1		1	1	1	1	1	G		G	G
Corn Oil	1	1		1	1	1	1	1					1	1	1	1	1				
Diesel	1	1		1	1	1				1						1		G	G		G
Freon R12							X	1	1	X	1				1				G	G	
Freon R134a	X	X	X	X			X	X	X	X	X	X	X	X	X	X					
Gasoline	1	1		1	1	1	X									1		G	G		G
Grease (Petroleum Base)	1	1		1	1	1	X			1	1					1		G	G	G	G
Hydraulic Oil (LHM)	1	1		1	1	1	X			1	1					1		G	G	G	G
LPG	1	1		1	1	1	X			1											
Lubricating Oils (Synthetic)	X	X	X	1	1	1	X										X		G		G
Lubricating Oils (Petroleum Base)	1	1		1	1	1	X			1	1					1		G	G	G	G
Methanol			1		1	1	X	1	1		1	1	1	1	1	1	1				
Motor Oils	1	1		1	1	1	X			1	1					1		G	G	G	G
Vegetable Oil	1	1		1	1	1	X			1	X					1	1				
Water+Glycol (Coolant)	1	1	1		1	1	X		1			X	X	X	X				G		G

Key:  
 1 = Satisfactory (seals)  
 X = Insufficient data  
 G = Good (hoses)

Name	Alternative names		Min.T	MaX.T
Nitrile	NBR	Buna-N	-34	121
Hydrogenated Nitrile	HNBR		-32	149
Ethylene Propylene Rubber	EPDM	EPR	-57	121
Fluorocarbon	FKM	Viton	-26	205
Hifluor FKM			-26	205
Perfluoroelastomer	FFKM		-26	260
Aflas	FEPM	TFE/propylene	-4	232
Neoprene			-37	107
Polyacrylate			-21	177
Polyurethane			-40	82
Butyl			-59	120
Fluorosilicone			-73	177
Silicone			-54	232
Polyvinyl Chloride	PVC			
Teflon	PTFE			

References: Parker Hannifin Corp. O-Ring Handbook 5700  
 Parker Hannifin Corp. Fluid Connectors Catalog 4660

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