

Page 1	PUMP COMPONENT MATLS															
	STAINLESS STEELS			PLASTICS							O RING MATLS			MISC		
CHART CODE: A - FULLY RESISTANT B - PARTLY RESISTANT X - UNSATISFACTORY BLANK - NO INFORMATION Note: The Information contained is intended to serve as a general guide and is based on various sources. Hibar accepts no responsibility for the accuracy of this information. For positive proof of chemical compatibility tests are recommended.	303 STAINLESS STL.	316 STAINLESS STL.	HASTALLOY 'C'	DELRIN	PVC	TEFLON	NYLON	POLYPROPYLENE	POLYETHYLENE	POLYURETHANE	NITRILE (BUNA N)	ETHYLENE PROPYLENE	FLUOROCARBON (VITON)	NEOPRENE	GLASS (PYREX)	ALUMINA CERAMIC
ACETALDEHYDE	A	A	A	A	X	A	B	X	B	X	X	B	X	X		A
ACETAMIDE		X				A			X	A	A	X	A			
ACETATE SOLVENTS		A			X	A		B	B		X	A	X	X		
ACETIC ACID - 10 PCT	A	A	A	A	A	A	X	B	A	X	X	A	X	X		
30 - 60 PCT	A	A	A	A	A	A	X	B	B	X	X	A	X	X	A	A
80 PCT	A	A	A	A	B	A	X	X	X	X	X		X	X	A	A
GLACIAL	A	A	A		B	A	X	X	X	X	X	B	X	X		A
ACETIC ANHYDRIDE	A	A	A		X	A	X	X	X	X	X	B	X	B	A	A
ACETONE	A	A	A	A	X	A	A	A	A	X	X	A	X	X	A	A
ACETOPHENONE								B		X	X	A	X	X		
ACETYL CHLORIDE		B				A				X	X	X	A	X	A	
ACETYLENE TETRABROMIDE						A				X	X	A	A	B		
ACRYLONITRILE		B				A	A	A	A		X	X	X	X		
ALUM			B	A	A	A		A	A		A	A	A	A		
ALUMINUM CHLORIDE	X	X	B	A	A	A	X	A	B	X	A	A	A	A	A	A
ALUMINUM FLUORIDE		X	B		A	A	X	A	A	X	A	A	A	A		
ALUMINUM HYDROXIDE	A	A	A		A	A	A	A	A		A		A	A	A	
ALUMINUM NITRATE	B					A	A		A	A	X	A	A	A	A	
ALUMINUM SULFATE	A	A		A		A	A	X	A	A	X	A	A	A	A	A
AMINES	A	A	A		X	A	A			X	X	B	X	B	A	
AMMONIA (ANHYDROUS LIQUID)	A	A	A		X	A	A	B	B	X	B	A	X	A	A	A
AMMONIA LIQUORS	B	A				A							X	A		
AMMONIA NITRATE	A	A				A					A			B		
AMMONIUM BICARBONATE	A	A				A					A			A		
AMMONIUM CARBONATE	A	A	B		A	A	A	A	A		X	A		A	A	
AMMONIUM CHLORIDE	X	X	B	A	A	A	B	A	A		A	A	A	A	A	A
AMMONIUM HYDROXIDE	A	A	B		A	A	A	A	A	X	X	A	X	A	X	
AMMONIUM NITRATE	A	A	A	A	A	A	A	A	A	X	A	A	B	A	A	A
AMMONIUM PERSULFATE	A	A	A		A	A	X	A		X	X	A	A	A	A	A
AMMONIUM PHOSPHATE	B	B	A		A	A	X	A	A		A	A	X	A	A	A
AMMONIUM SULFATE	B	B	A	A	A	A	X	A	A		A	A	X	A	A	A
AMMONIUM SULFIDE	B				A	A		A	A		A	A	X	A		
AMYL ACETATE	A	A	A	A	X	A	X	X	X	X	X	A	X	X	A	A
AMYL ALCOHOL		A	A		B	A	A	A	A	X	B	A	B	B	A	
AMYL CHLORIDE	B	X	A		X	A	X	X	X		A	X	A	X	A	A
ANILINE		A	A	A	X	A	X	B	X	X	X	B	X	X		A
ANILINE DYES	A					A				X	X	B	B	B		

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ANILINE HYDROCHLORIDE	X	X	A		X	A		X	X	X	B	B	B	X		
ANTIFREEZE (BRAND NAMES) DOWGUARD, HUBBARD HALL																
PEAK, PERMA-STA, PERMAGUARD, PYRO-PERM, SEARS, SHELLZONE																
SMITH-BLUE COLD, TEXACO, P.T., TELAR, WILCO, ZEREX	A	A			A						A		A	A		
ANTIFREEZE (PRESTONE)	A	A									A		B	X		
ANTIFREEZE (PYROSUPER)	A	A									A			X		
ANTIFREZE (VALVOLENE)	A	A									B			B		
ANTIMONY TRICHLORIDE		X	A	A	A	A	X	A	A				A		A	
AQUA REGIA		X	X	X	B	A	X	X	X	X	X	X	B	X		A
ARSENIC ACID	A	A	A		B	A	X	A	B	X	A	A	A	A	A	A
BARIUM CARBONATE		A	A		A	A	A	A	A				A		A	
BARIUM CHLORIDE	A	A	A	A	A	A	A	A	A	A	A	A	A	A		A
BARIUM HYROXIDE	A	A	A		A	A	A	A	A	X	A	A	A	A	A	
BARIUM SULFATE	B	B	A		A	A	A	A	A		A		A	A		A
BARIUM SULFIDE	B	A	A	B	A	A	A	A	A	A	A	A	A	A	X	
BEER	A	A	A	A	A	A	X	A	A	X	A	A	A	A		A
BEET SUGAR LIQUOR	A	A			A	A		A	A	X	A	A	A	B		
BENZALADEHYDE	X	A	A		X	A	A	X	X	X	X	A	X	X	A	A
BENZENE		A	A	A	X	A	A	X	X	X	X	X	A	X	A	A
BENZENESULFONIC ACID	B	B			A	A		B	B	X	X	X	A	B		
BEZOIC ACID	A	A	A	A	A	A	X	A	B	X	X	X	A	X	A	A
BENZYL ALCOHOL							X	A	A	X	X	B	A	A		
BENZYL CHLORIDE		X				A				X	X	X	A	X		
BLACK LIQUOR						A				X	B	B	A	B		
BLEACH		B	A		B	A		B	B	X	X	A	A	X		
BORAX	A	A	A		A	A	A	A	A	A	B	A	A	X	A	A
BORIC ACID	A	A	A	A	A	A	B	A	A	A	A	A	A	A	A	A
BORON FLUIDS (HEF)	A	A			X	A		A	A	X	B	X	A	X		
BRAKE FLUID	A	A		A		A					X	A	X	B		
BRINE	A	A			A	A		A	A		A	A	A	A		
BROMINE	X	X	A		X	A	X	X	X	X	X	X	A	X	A	A
BUTADIENE					B	B			X	X	X	X	A	X		
BUTANE	A	A			A	A	A	B	X	X	A	X	A	A		
BUTANOL		A	A		B	A			A	X	A	B	A	A	A	

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BUTTER	A	A			A	A	A			A	A	A	A	B	A	
BUTYL ACETATE	B	A	A	A	X	A	A	X	X	X	X	B	X	X	A	A
BUTYL ALCOHOL				A	B		B	A	A	X	A	B	A	A		
BUTYL CARBITOL						A					X	A	X	X		
BUTYL CELLOSOLVE						A				X	X	B	X	X		
BUTYLENE					A	A				X	B	X	A	X		
BUTYRALDEHYDE		X				A				X	X	B	X	X		
BUTYRIC ACID	B	A	A	A	B	A	X		X		X	B	B	X	A	A
CALCIUM ACETATE						A				X	B	A	X	B		
CALCIUM BISULFATE	A	A				A								A	A	
CALCIUM BISULFITE		A	A	A	A	A		A	A	A	A	X	A	A	A	A
CALCIUM CARBONATE	A	A	A		A	A	A	A	A	X	A	A	A	A	A	
CALCIUM CHLORATE		A	B		A	A		A	A						A	
CALCIUM CHLORIDE	X	X	A	A	A	A	X	A	A	A	A	A	A	A	A	A
CALCIUM HYDROXIDE	A	A	A	A	A	A	A	A	A	X	A	A	A	A	A	A
CALCIUM HYPOCHLORITE	B	B	X		A	A	X	A	A	X	B	A	A	B	A	A
CALCIUM NITRATE					A	A		A	A	A	A	A	A	A		A
CALCIUM SULFATE	A	A	B	A	A	A	A	A	A		A		A	A	A	A
CAMPHOR		A	A				A		A							
CANE SUGAR LIQUORS	A	A			A	A		A	A	X	A	A	A	A		
CARBOLIC ACID		A				A					X	B	A	X		
CARBON BISULFIDE		A	A		X	A		X	X		X	X	A	X		
CARBON DIOXIDE	A	A	A		A	A		A	A	A	A	B	B	B	A	
CARBON DISULFIDE	A	A			A	A	A	B	B		X	X	A	X	A	
CARBON MONOXIDE	A	A			A	A		A	A	A	A	A	A	B		
CARBON TETRACHLORIDE	A	A	A	A	X	A	A	X	X	X	B	X	A	X	A	A
CARBONIC ACID	A	A	A	A	A	A	A	A	A	A	B	A	A	A		A
CASTOR OIL	A	A			A	A		A	A	A	A	B	A	A	A	
CELLOSOLVE					B	A		A	B	X	X	B	X	X		
CELLOSOLVE ACETATE										X	X	B	X	X		
CELLULUBE	A	A								X	X	A	A	X		
CHLORIC ACID	X	X		B	A	A									A	
CHLORINATED SOLVENTS						A				X	X	X	A	X		
CHLORINE	B	B	A	X	X	A	X	B	B	X	X	X	A	X	A	A
CHLORINE DIOXIDE										X	X	X	A	X		
CHLOROACETIC ACID	X	X	A	X	B	A	X	X	X	X	X	B	X	X	A	A
CHLOROBENZENE	A	A	A	A	X	A	A	X	X	X	X	X	A	X	A	A

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CHLOROFORM	A	A	B	A	X	A	X	X	X	X	X	X	A	X	A	A
CHLOROSULFONIC ACID		X	A	X	X	A	X	X	X	X	X	X	X	X		A
CHROMIC ACID	B	B	B	X	B	A	X	B	B	X	X	B	A	X	A	A
CITRIC ACID	A	A	A	A	A	A	X	A	A	A	A	A	A	A	A	A
COCONUT OIL	A	A			A	A		B	B	X	A	X	A	X	A	
COD LIVER OIL	A	A			A					A	A	A	A	B	A	
COPPER ACETATE		A	A			A				X	B	A	X	B		
COPPER CHLORIDE	X	X	A		A	A	X	A	A	A	A	A	A	B	A	A
COPPER CYANIDE	A	A	A		A	A	A	A	A	A	A	A	A	A	B	A
COPPER NITRATE	A	A	A		A	A	X	A	A		A		B	A	A	A
COPPER SULFATE	A	A	A	A	A	A	X	A	A	X	A	A	A	B	A	A
CORN OIL	A	A			A	A			A	A	A	X	A	X	A	
COTTENSEED OIL	A	A			A	A		A	A	A	A	X	A	X	A	
CREOSOL	A	A			X	A		X	X	X	X	X	A	X		A
CREOSOTE	A	A				A			A	X	A	X	A	B		
CRESYLIC ACID	A	A	A		B	A	X	X	X	X	X	X	A	X	A	A
CRUDE OIL		A			A	A		X	X		B	X	A	X	A	
CYCLOHEXANE		A		A		A	A	B	A	A	A	X	A	X		
CYCLOHEXANOL				A	X	A	A	B	B		A	X	A	B		
CYCLOHEXANONE				A	X		A	X	X	X	X	B	X	X		
DENATURED ALCOLHOL						A				X	A	A	A	A		
DETERGENTS	A	A			A	A		A	A	X	A	A	A	B		
DEVELOPING SOLUTIONS		A		A		A			A		A	B	A	A		
DIACETONE						A				X	X	A	X	X		
DIACETONE ALCOLHOL						A	A		A	X	X	A	X	A		
DIBENZYL ETHER		A				A				B	X	B	X	X		
DIBENZYLE SEBACATE						A				B	X	B	B	X		
DIBUTYL ETHER		A				A				B	X	X	X	X		
DIBUTYL PHTHALATE				A		A	A	A	B	X	X	B	X	X		
DIBUTYL SEBACATE						A				X	X	B	B	X		
DICHLOROBENZENE						A			X	X	X	X	A	X		
DIESEL FUEL	A	A			A	A			B		A		A	X		
DIESEL OIL										X	A	X	A	X		
DIETHYLAMINE		A		A		A				X	B	B	X	B	A	
DIETHYLENE GLYCOL	B	A				A				X	A	A	A	A		
DIETHYL SEBACATE						A				X	X	B	B	X		
DI-ISOBUTYLENE						A				X	B	X	A	X		

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DI-ISOPROPYL KETONE		A				A				X	X	A	X	X		
DIMETHYLFORMAMIDE				A		A	A			X	B	X	X	X		
DIMETHYL PHTHALATE						A					X	B	B	X		
DIOCTYL PHTHALATE					X		A	X	X	X	X	B	B	X		
DIOCTYL SEBACATE						A				B	X	B	B	X		
DIOXANE				A		A	A	B	A	X	X	B	X	X		
EPICHLOROHYDRIN						A				X	X	B	X	X		
ETHANE						A				X	A	X	A	B		
ETHANOL										X	A	A	X	A		
ETHANOLAMINE						A				X	B	B	X	B		
ETHERS	A	A	A		X	A		X	X	B	X	X	X	X	A	
ETHYL ACETATE	A	A	A		X	A	A	A	X	X	X	B	X	X	A	A
ETHYL ACETOACETATE						A				X	X	B	X	X		
ETHYL ACRYLATE					X	A		B		X	X	B	X	X		
ETHYL ALCOHOL	A	A	A	A	A	A	A	A	A	B	A	A	X	A	A	A
ETHYL BENZENE						A				X	X	A	A	X		
ETHYL BROMIDE						A					B	X	A	X		
ETHYL CHLORIDE	A	A	A		X	A	A	X	X	B	A	A	A	A	A	A
ETHYL ETHER	A	A		A	X	A	A	X	X	B	X	X	X	X		
ETHYLENE BROMIDE					X	A		X	X			X				
ETHYLENE CHLORIDE		A		A		A		B	B	X	X	X	B	X		
ETHYLENE CHLOROHYORIN					X	A		X	X	X	X	B	A	B	A	
ETHYLENE DIAMINE						A			A	X	A	A	X	A		
ETHYLENE DIBROMIDE	A					A				X	X	X	A	X		
ETHYLENE DICHLORIDE	A	A			X	A	A	X	X	X	X	X	A	X	A	
ETHYLENE GLYCOL	A	A	A	A	A	A	A	A	A	B	A	A	A	A	A	A
ETHYLENE OXIDE		A		B	X	A	A	X	X	X	X	X	X	X	A	
FATTY ACIDS	A	A	A	A	A	A	X	A	B		B	X	A	B	A	A
FERRIC CHLORIDE	X	X	A	A	A	A	X	A	A	A	A	A	A	B	A	A
FERRIC NITRATE	A	A	A		A	A		A	A	A	A	A	A	A	A	A
FERRIC SULFATE	B	A	A	A	A	A	X	A	A	A	A	A	A	A	A	A
FERROUS CHLORIDE	X	X	A		A	A	X	A	A		A		B	A	A	A
FERROUS SULFATE	A	A	A		A	A	X	A	A		A		B	A	A	A
FLUOROBORIC ACID	B	B	A		A	A	X	A	A		A	A		A		X
FLUORINE		X		X	X	X	X	X	X			X	B		X	
FLUROSILICIC ACID	X	A	B		A	A	X	A	A		A	A	B	A		X
FORMALDEHYDE	A	A	A	A	B	A	X	A	B	X	X	B	X	X	A	A

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FORMIC ACID	B	B	A		B	A	A	A	A	X	B	A	X	A	A	A
FREONS	B	B			B	A	A	B	B	B	B	B	B	B		A
FRUIT JUICE	A	A		A	A	A	A	A	A		A		A	A		
FUEL OIL	A	A	A		A	A		X	X	X	A	X	A	B	A	A
FURAN	A	A				A					X	X	A	X		
FURFURAL	A	A	B		X	A	A	X	X		X	B	X	X		A
FURFURYL ALCOLHOL						A			A	X	X	B		X		
GALLIC ACID	A	A	A		A	A	A	A	A	X	B	B	A	B	A	
GASOLINE	A	A	A	A	B	A	A	X	X	B	A	X	A	X	A	A
GELATINE	A	A		A	A	A	A	A	A	X	A	A	A	A		
GLUCOSE	A	A			A	A	A	A	A	X	A	A	A			
GLUES	A	A				A				A	A	A	A	A		
GLYCERIN	A	A	A	A	A	A	A	A	A	X	A	A	A	A	A	A
GLYCOLS				A	A	A	A	A	A	X	A	A	A	A		
GREASES	A	A				A				A	A	X	A	B		
GREEN LIQUOR					A	A		A	A	A	B	A	A	B		
HEPTANE	A	A	A		B	A	A	X	X	B	A	X	A	B		A
HEXANE	A	A	A	A	B	A	A	X	X	B	A	X	A	B		A
HEXYL ALCOLHOL						A				X	A	X	A	B		
HYRAULIC FLUID	A	A				A					B		A	X		
HYDRAULIC OIL	A	A				A				A	A	X	A	B		
HYDRAZINE	A	A				A				X	B	A		B		
HYDROBROMIC ACID	X	X	B	A	A	A	X	A	A	X	X	A	A	X	A	X
HYDROCARBONS		A	A			A				B	A	X	A	B		
HYDROCHLORIC ACID 0 - 10%	X	X	X		A	A	X	A	A	X	X	A	A	X	A	X
HYDROCHLORIC ACID CONC.	X	X	X		B	A	X	A	B	X	A	A	A	A	A	A
HYDROCYANIC ACID	A	A	A	A	A	A	A	A	A		B	A	A	B	A	X
HYDROFLUORIC ACID 0 - 10%	X	X	B	X	B	A	X	A	B	X	X	A	B	B	X	X
HYDROFLUORIC ACID CONC.	X	X	X	X	B	A	X	A	B	X	X	X	X	X	X	X
HYDROFLUOSILICIC ACID	X	X	B		B	A	X				B	A	A	B	X	X
HYDROGEN					A	A	A	A	A	A	A	A	A	A	A	A
HYDROGEN CHLORIDE	B					A					A	A		A		
HYDROGEN PEROXIDE	B	B	A	B	B	A	X	X	B		B	B	A	B	A	
HYDROGEN SULFIDE	B	B	A		A	A	X	A	A		X	A	X	B	A	
HYDROQUINONE					A	A	A	A	A		X	X	B	X		
HYPOCHLOROUS ACID	X				A	A		A	A		X	B	A	X		
INKS		A				A					A		A	A		

Page 7	PUMP COMPONENT MATLS															
	STAINLESS STEELS			PLASTICS							O RING MATLS			MISC		
CHART CODE: A - FULLY RESISTANT B - PARTLY RESISTANT X - UNSATISFACTORY BLANK - NO INFORMATION Note: The Information contained is intended to serve as a general guide and is based on various sources. Hibar accepts no responsibility for the accuracy of this information. For positive proof of chemical compatibility tests are recommended.	303 STAINLESS STL.	316 STAINLESS STL.	HASTALLOY 'C'	DELRIN	PVC	TEFLON	NYLON	POLYPROPYLENE	POLYETHYLENE	POLYURETHANE	NITRILE (BUNA N)	ETHYLENE PROPYLENE	FLUOROCARBON (VITON)	NEOPRENE	GLASS (PYREX)	ALUMINA CERAMIC
IODINE	X	X	X	B	X	A	X	B	X		B	B	A	X	A	A
IODIFORM	A	A				A	A					A	X		A	
ISOBUTYL ALCOLHOL						A				X	B	A	A	A		
ISO OCTANE				A		A	A		B	B	A	X	A	B		
ISOPROPANOL						A				X	B	A	A	B		
ISOPROPYL ACETATE										X	X	B	X	X		
ISOPROPYL ALCOLHOL	A	A		A	A	A	A	A	A	X	B	A	A	B		
ISOPROPYL ETHER						A			B	B	B	X	X	X		
JET FUELS	A	A			A	A					A		A	X		
KEROSENE	A	A	A		A	A	A	X	X	A	A	X	A	B	A	A
LAQUERS	A	A				A				X	X	X	X	X		
LAQUER SOLVENTS	A	A	A		X	A	A	X		X	X	X	X	X		A
LACTIC ACID	A	A	A	A	A	A	X	A	A		B	B	A	B	A	A
LARD OIL	A	A			A	A			B	A	A	B	A	B		
LATEX	A	A				A					A			A		
LEAD ACETATE		A	A		A	A	A	A	A	X	B	A	X	B	A	A
LEAD NITRATE						A					A	A		A		
LIME						A					A		A	A		
LINOLEIC ACID					A			B			B	X	B	B		
LINSEED OIL	A	A			A	A		A	X	B	A	X	A	X		
LIQUORS		A	A		A	A		A	A		A					
LITHIUM BROMIDE					A	A					A		A	X		
LUBRICATING OILS	A	A	A		A	A		X	X	B	A	X	A	B		A
LYE SOLUTIONS		A	A			A				X	B	A	B	B		
MAGNESIUM CHLORIDE	B	B	A	A	A	A	A	A	A	A	A	A	A	A	A	A
MAGNESIUM HYDROXIDE	A	A	A		A	A	A	A	A	X	B	A	A	B	A	A
MAGNESIUM NITRATE	A	A	A		A	A	A	A	A		A		A	A		
MAGNESIUM SULFATE	A	A	B	B	A	A	A	A	A		A	A	A	A	A	A
MALEIC ACID	B	B	B	X	A	A	A	A	A		X	X	A	X		A
MALEIC ANHYDRIDE						A					X	X	A	X		
MALIC ACID		A	A		A	A	A	A	A		A	X	A	B	A	
MAYONNAISE	B	A					A				A		A	A		
MERCURIC CHLORIDE		X	B	A	A	A	A	A	A		A	A	A	A	A	
MERCURIC CYANIDE		A	A		A	A		A	A							
MERCUROUS NITRATE		A	A		A			A	A							
MERCURY	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	
MESITYL OXIDE										X	X	B	X	X		

Page 8	PUMP COMPONENT MATLS															
	STAINLESS STEELS			PLASTICS							O RING MATLS			MISC		
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METHANOL	A	A	A	A	A	A	A	A	X	X	A	A	X	A	A	A
METHYL ACETATE						A	A			X	X	B	X	B		
METHYL ALCOHOL	A	A	A	A	A	A	A	A	A	X	A	A	X	A	A	A
METHYL BROMIDE						A					B	X	A	X		
METHYL CELLOSOLVE		A				A				X	X	B	X	X		
METHYL CHLORIDE	A	A	B		X	A	A	X	X	X	X	X	A	X	A	A
METHYL ETHYL KETONE	A	A	A		X	A	A	X	X	X	X	A	X	X		A
METHYL ISOBUTYL KETONE	A	A	A		X	A	A	X		X	X	X	X	X		A
METHYL METHACRYLATE						A					X	X	X	X		
METHYL SALICYLATE						A					X	B		X		
METHYLENE CHLORIDE		A	A	X	X	A	X	B	X	X	X	X	B	X		A
MILK	A	A			A	A	A	B	A	X	A	A	A	A		
MINERAL OIL	A	A		A	A	A		X	B	A	A	X	A	B		A
MOLASSES	A	A			A	A		A	A		A		A	A		
MONOETHANOLAMINE						A				X	X	B	X	X		
MOTOR OIL	A	A	A		A	A		X	X	B	A	X	A	A		A
MURIATIC ACID	X	X				A					A	A	A	B		
MUSTARD	A	A	A			A	A				B		A	A		
NAPHTHA	A	A	A		A	A	A	X	X	B	B	X	A	X	A	A
NAPHTHALENE	A	A	A	A	X	A	A	X	X		X	X	A	X		A
NAPHTHENIC ACID	A					A					B	X	A	X		
NICKEL CHLORIDE	B	B	A		A	A	A	A	A	X	A	A	A	B	A	A
NICKEL NITRATE		A	A		A			A	A							
NICKEL SULFATE		A	A	A	A	A	A	A	A	X	A	A	A	A	A	A
NITRIC ACID 0 - 10%	B	A	A	X	B	A	X	A	A	X	X	B	A	X	A	A
NITRIC ACID CONC.	B	B	B	X	B	A	X	X	B	X	X	X	A	X	A	A
NITRIC ACID RED FUMINC	B	B	A	X		A				X	X	X	B	X	A	A
NITROBENZENE		A	A		X	A	A	X	X	X	X	X	B	X	A	A
NITROGEN						A				A	A	A	A	A		
NITROMETHANE						A	A			X	X	B	X	X		
NITROPROPANE						A		X	X	X	X	B	X	X		
NITROUS ACID		A			A	A									A	
OCTYL ALCOLHOL						A				X	B	A	A	B		
OLEIC ACID	A	A	A		A	A	X	B	A	B	X	X	B	X	A	A
OLEUM		A	A		X	A	X	X	X	X	X	X	A	X		A
OLIVE OIL	A	A			X	A				A	A	B	A	B		
ORANGE OIL	A	A				A					A		A	X		

Page 9	PUMP COMPONENT MATLS															
	STAINLESS STEELS			PLASTICS						O RING MATLS				MISC		
CHART CODE: A - FULLY RESISTANT B - PARTLY RESISTANT X - UNSATISFACTORY BLANK - NO INFORMATION Note: The Information contained is intended to serve as a general guide and is based on various sources. Hibar accepts no responsibility for the accuracy of this information. For positive proof of chemical compatibility tests are recommended.	303 STAINLESS STL.	316 STAINLESS STL.	HASTALLOY 'C'	DELRIN	PVC	TEFLON	NYLON	POLYPROPYLENE	POLYETHYLENE	POLYURETHANE	NITRILE (BUNA N)	ETHYLENE PROPYLENE	FLUOROCARBON (VITON)	NEOPRENE	GLASS (PYREX)	ALUMINA CERAMIC
OXALIC ACID	A	B	B	A	A	A	X	A	A		B	A	A	B	A	A
OXYGEN					A	B	A	A		A	B	A	A	A		
OZONE					X	B	X	X	X	A	X	A	A	X		
PALMITIC ACID					B	A		B	A	A	A	B	A	B		
PALM OIL	A	A				A					A		A	X		
PARAFIN	A	A				A			A							
PEANUT OIL	A	A				A				B	A	X	A	X		
PERCHLORIC ACID	X				B	A		X	A	X	X	B	A	B		
PERCHLORETHYLENE	A	A				A	B			X	B	X	A	X		
PETROLEUM ETHER		A		A		A	A		B			A				
PHENOL	A	A	A	A	X	A	X	X	X	X	X	X	A	X	A	A
PHENYLHIDRAZINE					X	A		X	X		X	X	A	X		
PHOSPHORIC ACID 0 - 10%	A	A	A	X	A	A	X	A	A	A	X	A	A	X	A	A
20 - 30%	B	B	A	X	A	A	X	A	A	A	X	A	A	X	A	A
60%	B	B	B	X	A	A	X	A	B		X	A	A	X	B	A
CONC.	B	B	B	X	A	A	X	X	B		X	B	A	X	X	A
PHOSPHOROUS TRICHLORIDE		A	A	X	X	A		X	X		X	A	A	X		
PHTOGRAPHIC SOLUTIONS	B	B			A	A		A	A					A		A
PHTHALIC ANHYDRIDE			A			A						A			A	
PICRIC ACID	A	A	A		X	A	X	B	B	B	B	B	A	B	A	
PINE OIL		A				A					A	X	A	X		
PLATING SOLUTIONS:																
BRASS		A	A		A	A	A	A	B		A		A	A		B
CADMIUM		A	A		A	A	B	A	B		B		A	B		B
CHROMIUM		X	B		B	A	X	A	X		X		X	X		A
COPPER		B	A		A	A	B	A	B		B		A	B		B
GOLD		B	A		A	A	A	A	B		A		A	A		B
INDIUM		X	A		A	A	X	A	B		A		A	A		A
LEAD		X	A		A	A	X	A	B		B		A	B		X
NICKEL		X	A		A	A	B	A	B		B		A	B		A
RHODIUM		X	X		A	A	X	A	B		A		A	B		A
SILVER		A	A		A	A	A	A	B		A		A	A		B
TIN		X	A		A	A	X	A	B		B		A	B		X
ZINC		B	B		A	A	X	A	B		B		A	B		B
POTASSIUM ACETATE						A				X	B	A	X	B		
POTASSIUM BICARBONATE	A	A	A		A	A	A	A	A		B		B	A		A
POTASSIUM BICHROMATE		A	A	A	A		B	A	A							

PUMP COMPONENT MATLS

	STAINLESS STEELS			PLASTICS						O RING MATLS			MISC			
	303 STAINLESS STL.	316 STAINLESS STL.	HASTALLOY 'C'	DELRIN	PVC	TEFLON	NYLON	POLYPROPYLENE	POLYETHYLENE	POLYURETHANE	NITRILE (BUNA N)	ETHYLENE PROPYLENE	FLUOROCARBON (VITON)	NEOPRENE	GLASS (PYREX)	ALUMINA CERAMIC
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POTASSIUM BROMIDE		A	A		A	A	X	A	A		B		B	A	A	A
POTASSIUM CARBONATE	A	A	A		A	A	A	A	A		B		B	A	X	A
POTASSIUM CHLORATE		A	A		A	A	X	A	A		B		B	A	A	A
POTASSIUM CHLORIDE	B	B	B		A	A	X	A	A	A	A	A	A	A	A	A
POTASSIUM CYANIDE	A	A	B		A	A	A	A	A	A	A	A	A	A	X	A
POTASSIUM DICHROMATE	A	A	B		A	A	X	A	A	B	A	A	A	A	A	A
POTASSIUM FERRICYNIDE		A	A		A			A	A							
POTASSIUM FERROCYNIDE		A	A		A	A	A								A	
POTASSIUM HYDROXIDE at 20°C	B	B	B		A	A	A	A	B	X	B	A	X	B	A	X
POTASSIUM HYPOCHLORITE		B	A		B				B							
POTASSIUM NITRATE		A	B		A	A	X	A	A	A	A	A	A	A	A	A
POTASSIUM PERMANGANATE	B	B	B	A	B	A	X	A	A		B	A	B	A	A	A
POTASSIUM SULFATE	B	B	B	A	A	A	X	A	A	A	A	A	A	A	A	A
POTASSIUM SULFIDE		A		A	A	A	A	A	A						X	
POTASSIUM SULFITE	A			A		A				A	A	A	A	A		
PROPANE		A			A	A	A	X	X	X	A	X	A	B		
PROPIONIC ACID				A		A					X		X	X		
PROPYL ACETATE				A						X	X	B	X	X		
PROPYL ALCOHOL		A	A		A	A	A	A	A	X	A	A	A	A		A
PROPYLENE DICHLORIDE					X	A		X	X		X		A	X		
PROPYLENE GLYCOL		A				A					A			B		
PROPYLENE OXIDE										X	X	B	X	X		
HYDRAULIC FLUIDS		A								X	X	B	A	X		
PYRIDINE	B	B		A	X	A	B		B		X	B	X	X		
RAPESEED OIL	A	A				A				B	B	A	A	B		
RED OIL		A								A	A	X	A	B		
SALICYLIC ACID	B		A		A	A	A	A	A		B	A	A			
SILICONE OILS	A	A				A			A	A	A	A	A	A		
SILVER CYANIDE		A	A		A			A	A							
SILVER NITRATE	A	A	B		A	A	A	A	A	A	B	A	A	A	A	
SKYDROL HYDRAULIC FLUID	A									X	X	A	X	X		
SOAPS	A	A	A		A	A		A	A	X	A	A	A	B		A
SODA ASH	A	A			A	A		A	A		A	A	A	A		
SODIUM ACETATE	B	A	B	A	A	A	A	A	A	X	B	A	X	B	A	A
SODIUM BENZOATE	A		A		A	A		A	A							
SODIUM BICARBONATE	A	A	B		A	A	A	A	A		A	A	A	A		A
SODIUM BICHROMATE		A	A			A					A					

Page 11	PUMP COMPONENT MATLS															
	STAINLESS STEELS			PLASTICS						O RING MATLS				MISC		
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SODIUM BISULFATE	A	A	B		A	A		A	A		A	A	A	A	A	
SODIUM BISULFITE	A	A	A		A	A	X	A	A		A	A	A	A	A	
SODIUM BORATE		A	A		A	A	A		A		A	A	A	A		
SODIUM BROMIDE		A	A		A		A	A	A							
SODIUM CARBONATE	A	A	A	A	A	A	A	A	A		A	A	A	A	X	
SODIUM CHLORATE		A	A		A	A	X	A	A		X		A	A	A	A
SODIUM CHLORIDE		A	B		A	A	A	A	A	A	A	A	A	A		A
SODIUM CHROMATE		A									A		A	A		
SODIUM CYANIDE	A	A	A		A	A	X	A	A		A	A	A	A	X	A
SODIUM FERRICYANIDE		A	A		A			A	A							
SODIUM FLUORIDE		X	A		A	A	A	A	A				A		X	
SODIUM HYDROXIDE at 20'C	B	B	B	A	A	A	A	A	A	B	B	A	B	B	A	X
SODIUM HYPOCHLORITE	B	B	B	A	A	A	X	A	A	X	B	B	A	X	A	A
SODIUM META PHOSPHATE	B				A						A	A	A	B		
SODIUM NITRATE	A	A	B	A	A	A	X	A	A		B	A	A	B		
SODIUM PERBORATE	B	B				A					B	A	A	B		
SODIUM PEROXIDE	A	A	A		A	A			B	X	B	A	A	B	X	
SODIUM PHOSPHATE	A	A	A		A	A	A	A	A	A	A	A	A	B	X	
SODIUM SILICATE	A	A	B	A	A	A	A	A	A		A	A	A	A	X	A
SODIUM SULFATE	B	A	A	B	A	A	A	A	A	A	A	A	A	A	A	A
SODIUM SULFIDE	A	A	B		A	A	A	A	A	A	A	A	A	A	X	A
SODIUM SULFITE	B	A	A		A	A	A	A	A	A	A	A	A	A	A	
SODIUM THIOSULFATE		A		A	A	A	A	A	A	A	B	A	A	A		A
SOYA BEAN OIL	A	A				A				B	A	X	A	X		
SPERM OIL	A	A				A					A		A	X		
STANNIC CHLORIDE	X	X	B		A	A	X	A	A		A	A	A	X	A	A
STANNOUS CHLORIDE		B	A		A	A		A	A		A	A	A	A	A	
STARCH	A	A		A		A			A		A		B	A		
STEARIC ACID	A	A	A		A	A	A	A	A		B	B	A	B	A	A
STODDARD'S SOLVENT	A	A	A		A	A		A	B	A	A	X	A	B		
STYRENE		A				A	A				X	X	B	X		
SUCROSE	A					A				X	A	A	A	B		
SUGAR	A	A				A			A		A		A	A		
SULFITE LIQUOURS						A					B	B	A	B		
SULFUR	A	A	X		A	A		A	A		X	A	A	A	A	
SULFUR CHLORIDE	X	X	A		X	A					X	X	A	X	A	
SULFUR DIOXIDE	B	B	A		B	A	X	B	B		X	A	X	X	A	

	STAINLESS STEELS			PLASTICS						O RING MATLS			MISC			
	303 STAINLESS STL.	316 STAINLESS STL.	HASTALLOY 'C'	DELRIN	PVC	TEFLON	NYLON	POLYPROPYLENE	POLYETHYLENE	POLYURETHANE	NITRILE (BUNA N)	ETHYLENE PROPYLENE	FLUOROCARBON (VITON)	NEOPRENE	GLASS (PYREX)	ALUMINA CERAMIC
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SULFURIC ACID 10-20%	X	X	B		A	A	X	A	A	B	X	B	A	B	A	A
SULFURIC ACID 30-50%	X	X	B		A	A	X	A	B		X	X	A	X	A	A
SULFURIC ACID 70-90%	X	X	B		B	A	X	B	X		X	X	A	X	A	A
SULFURIC ACID 90% +	X	X	B		B	A	X	B	X	X	X	X	A	X	A	A
SULFUROUS ACID		X	B		A	A	X	A	A	X	B	B	A	B	A	
SULFUR TRIOXIDE	B	A			A	A		X	X		X	B	A	X	A	
TANNIC ACID	X	X	A		A	A	X	A	A	A	A	A	A	B	A	A
TANNING LIQUORS	A	A	A		A	A		A	B		A			A		A
TAR	A	A				A	B				B	X	A	X		
TARTARIC ACID	B	B	B	A	A	A	A	A	A	A	A	B	A	B	A	A
TETRACHLOROETHANE	A	A				A			B	X	X	X	A	X		
TETRACHLORETHYLENE		A	A			A				X	X	X	A	X		
TRAETHYL LEAD	A	A			B	A		B			B	X	A	B		
TRAHYDROFURAN		A	A		X	A	A	X	X		X	B	X	X		A
TETRALIN				A		A		X	B		X	X	A	X		
THIONYL CHLORIDE		X			X	A	X	B	X			X	A	X		
TITANIUM TETRACHLORIDE			A		B	A		B		X	B	X	A	X		
TOLUENE	A	A	A	A	X	A	A	X	X	X	X	X	A	X	A	A
TRANSFORMER OIL	A	A			A	A			B	A	A	X	A	B		
TRANSMISSION FLUID	A	A				A				A	A	X	A	B		
TRIBUTYL PHOSPHATE					X	A		B	B	X	X	A	X	X		
TRICHLOROETHYLENE	A	A	A	A	X	A	X	X	X	X	X	X	A	X	A	A
TRICRESYL PHOSPHATE		A	A		X	A			A	X	X	A	B	X		A
TRIETHANOLAMINE					B	A	A	B	B	X	X	B	X	B		
TRISODIUM PHOSPHATE					A	A	A	A	A		A	A				
TUNG OIL	A	A				A				X	A	X	A	B		
TURPENTINE	A	A	A		B	A	A	X	X	X	A	X	A	X		A
UREA		A	A		A	A	B	A	A		X		X	A		A
URINE	A	A			A	A		A	A		A			X		
VANILLA EXTRACT		A				A					A		X	A		
VARNISH	A	A				A				X	B	X	A	X		
VEGETABLE OIL	A	A				A					A	X	A	X		
VINEGAR	A	A	A		A	A	A	A	A	X	B	A	A	B		A
WATER-ACID MINE	A	A			A	A		A	A		A		A	B		
WATER - DISTILLED	B	B			A	A		A	A		A		A	A	B	
WATER - FRESH	A	A			A	A		A	A				A	A	A	
WATER - SALT	A	A	A		A	A		A	A		A		A	A		

Page 13	PUMP COMPONENT MATLS															
	STAINLESS STEELS			PLASTICS						O RING MATLS				MISC		
CHART CODE: A - FULLY RESISTANT B - PARTLY RESISTANT X - UNSATISFACTORY BLANK - NO INFORMATION Note: The Information contained is intended to serve as a general guide and is based on various sources. Hibar accepts no responsibility for the accuracy of this information. For positive proof of chemical compatibility tests are recommended.	303 STAINLESS STL.	316 STAINLESS STL.	HASTALLOY 'C'	DELRIN	PVC	TEFLON	NYLON	POLYPROPYLENE	POLYETHYLENE	POLYURETHANE	NITRILE (BUNA N)	ETHYLENE PROPYLENE	FLUOROCARBON (VITON)	NEOPRENE	GLASS (PYREX)	ALUMINA CERAMIC
WATER - SEA		A	A	A			A		A							
WHISKEY	A	A			A	A		A	A	X	A	A	A	A		
WINES	A	A			A	A	A	A	A	X	A	A	A	A		
XYLENE	A	A	A	A	X	A	A	X	X	X	X	X	A	X		A
XYLOI	A	A	A	A	X	A	A	X	X	X	X	X	A	X		A
YEAST		A		A		A			A		A					
ZINC CHLORIDE	B	B	B	A	A	A	X	A	A		A	A	A	A	A	A
ZINC NITRATE		A			A	A		A	A		A					
ZINC SULFATE	B	B	A		A	A	X	A	A		A	A	A	A	A	A