

# CHEMICAL COMPATIBILITY FOR DIAPHRAGM PUMPS

CHEMICALS	METALS					PLASTICS, ELASTOMERS & LEATHER																				
	Aluminum	Carbon Steel	Cast/Ductile Iron	304 Stainless Steel	316 Stainless Steel	Acetal	Buna	CSM (Hypalon)	EPR, EPDM	Fluorocarbon	Fluoroelastomer (FKM)	Geolast (Buna & Polypropylene)	Hastelloy C	TPE	Leather	Nitrile (TS)	Nitrile (TPE)	Nylon	Polychloroprene	Polypropylene	PTFE	PVDF	Santoprene (EPDM & Polypropylene)	UHMWPE	Urethane	
A: Excellent, B: Good, C: Fair to Poor, D: Not recommended  - No Data																										
Acetaldehyde	B	D	C	A	A	A	D	C	A	D	D	D	A	B	B	D	D	B	D	C	A	D	B	B	D	
Acetamide	A	D	D	D	A	A	B	B	A	B	B	A	A	D	-	A	A	B	B	A	A	D	A	A	D	
Acetate Solvents	B	D	D	D	A	A	D	C	B	D	D	D	D	D	-	D	D	A	D	D	A	D	B	B	D	
Acetic Acid	B	D	D	D	B	D	C	C	A	-	C	-	A	D	D	C	C	D	C	B	A	C	C	B	C	
Acetic Acid — 20%	B	D	D	B	A	C	C	A	A	C	B	D	C	-	-	-	-	D	B	B	A	B	B	A	-	
Acetic Acid — 30%	D	-	A	A	-	B	C	-	A	D	-	-	C	-	-	-	-	-	B	B	A	B	B	A	-	
Acetic Acid — 50%	D	-	A	A	-	B	C	-	A	C	-	-	C	-	-	-	-	-	C	B	A	B	B	A	-	
Acetic Acid — 80%	B	D	D	D	B	D	C	C	A	-	B	D	A	-	-	-	-	D	C	A	A	C	-	-	-	
Acetic Acid — Glacial	B	D	D	C	A	D	D	C	B	D	D	B	A	C	-	-	-	D	D	C	A	A	D	B	-	
Acetic Acid Vapors	A	-	-	-	A	-	-	-	-	-	-	-	-	D	D	-	-	D	-	-	A	D	-	-	-	
Acetic Anhydride	D	D	D	D	B	D	D	A	D	D	D	D	A	C	B	D	D	D	B	D	A	D	D	D	B	
Acetone	B	A	A	A	A	B	D	C	A	D	D	D	A	C	-	D	D	B	D	D	A	D	B	A	D	
Acetone 120° F	-	-	-	-	-	B	-	-	-	-	-	-	-	-	-	-	-	B	-	A	A	D	-	A	-	
Acetone 140° F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	A	D	-	D	-	
Acetone 70°F	A	-	B	A	A	-	D	-	A	-	D	-	-	C	-	-	-	A	-	A	A	D	A	A	-	
Acetone Cyanohydrin	B	-	B	B	-	-	D	-	D	D	-	D	-	-	-	-	-	-	B	-	A	-	A	-	-	
Acetonitrile (Methyl Cyanide)	A	A	A	A	A	A	C	-	A	D	D	D	B	-	-	D	D	A	D	D	A	B	A	-	B	
Acetophenone	B	A	A	A	B	-	D	-	B	D	D	D	B	-	-	D	D	A	D	C	A	B	B	-	-	
Acetyl Acetone	D	-	B	B	-	-	D	-	A	D	D	D	-	-	-	D	D	-	D	-	A	-	B	-	D	
Acetyl Bromide	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	D	-	-	A	-	-	-	-	
Acetyl Chloride	D	B	B	B	B	D	D	D	D	B	B	D	A	D	-	D	D	D	D	D	A	A	B	-	D	
Acetyl Salicylic Acid (Aspirin)	D	-	B	B	-	-	-	-	B	-	A	-	-	-	-	A	-	-	D	-	A	-	C	A	-	
Acetylene	A	A	A	A	A	A	B	B	A	-	A	B	A	B	A	A	A	B	B	D	A	A	-	-	D	
Acetylene Tetrabromide	D	-	A	-	-	-	D	-	-	A	-	D	-	-	-	-	-	-	D	-	A	-	D	-	-	
Acid (Concentrated)	-	-	-	-	-	-	-	-	B	-	A	-	-	-	-	-	-	-	-	-	A	-	-	-	-	
Acid (Mild)	-	-	-	-	-	-	A	-	B	-	A	-	-	-	-	-	-	-	-	-	A	-	-	-	-	
Acid Mine Water	-	-	-	-	-	A	-	-	-	-	-	-	-	-	-	-	-	A	-	A	A	A	-	A	-	
Acrolein (Acryaidethyde)	B	-	B	B	-	-	B	-	A	A	B	B	-	D	-	C	-	-	D	-	A	-	A	-	D	
Acrylonitrile	B	A	A	A	A	-	D	C	D	D	D	D	B	D	-	D	D	B	D	B	A	B	D	-	D	
Adipic Acid	B	A	B	B	B	B	C	-	A	A	A	A	A	D	-	A	B	A	D	B	A	B	B	A	-	
Aero Lubriplate	A	A	A	A	A	A	A	-	D	-	A	-	A	D	-	A	A	-	A	A	A	A	C	-	-	
Aerosafe 1Ac	-	-	-	-	-	A	A	-	D	-	A	-	-	-	-	-	-	-	B	-	A	-	-	-	-	

# CHEMICAL COMPATIBILITY FOR DIAPHRAGM PUMPS

CHEMICALS	METALS					PLASTICS, ELASTOMERS & LEATHER																				
	Aluminum	Carbon Steel	Cast/Ductile Iron	304 Stainless Steel	316 Stainless Steel	Acetal	Buna	CSM (Hypalon)	EPR, EPDM	Fluorocarbon	Fluoroelastomer (FKM)	Geolast (Buna & Polypropylene)	Hastelloy C	TPE	Leather	Nitrile (TS)	Nitrile (TPE)	Nylon	Polychloroprene	Polypropylene	PTFE	PVDF	Santoprene (EPDM & Polypropylene)	UHMWPE	Urethane	
A: Excellent, B: Good, C: Fair to Poor, D: Not recommended  - No Data																										
Aerosafe 2300	A	A	A	A	A	A	D	-	A	-	D	-	-	B	-	D	D	-	D	-	A	-	B	-	A	
Aerosafe 2300F	A	A	A	A	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Aerosafe 2300W	A	-	A	A	-	A	D	-	A	-	D	-	-	A	-	D	D	-	D	-	A	-	B	-	D	
Aeroshell 17 Grease	A	A	A	A	A	A	A	-	D	-	A	-	-	D	-	A	A	-	B	-	A	-	D	-	A	
Aeroshell 1Ac	A	A	A	A	A	A	-	-	D	-	A	-	A	D	-	A	A	-	B	A	A	B	D	-	B	
Aeroshell 750	A	A	A	A	A	A	B	-	D	-	A	-	-	D	-	B	C	-	D	-	A	-	D	-	A	
Aeroshell 7A Grease	A	A	A	A	A	A	A	-	D	-	A	-	-	D	-	A	A	-	B	-	A	-	D	-	D	
Alcohol	A	A	A	A	A	B	A	-	B	-	A	-	-	B	A	-	-	D	-	B	A	A	A	A	-	
Alcohol: Allyl	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Alcohol: Amyl	B	B	B	A	A	A	B	A	A	-	B	B	A	A	-	B	B	A	B	B	A	A	A	A	D	
Alcohol: Benzyl	B	B	B	B	B	A	D	C	C	-	A	-	A	D	-	D	D	D	C	A	A	A	A	A	C	
Alcohol: Butyl	B	B	B	A	A	A	C	A	A	-	A	-	A	D	-	A	B	D	A	B	A	A	A	A	D	
Alcohol: Diacetone	B	A	B	A	A	A	D	D	B	-	D	-	A	D	-	D	D	A	D	B	A	A	C	-	B	
Alcohol: Ethyl	B	B	B	A	A	A	C	A	A	-	A	-	A	A	-	A	A	B	A	A	A	A	B	A	D	
Alcohol: Hexyl	A	A	A	A	A	A	A	B	C	-	C	-	A	D	-	A	A	A	B	A	A	A	B	-	D	
Alcohol: Isobutyl	B	C	C	A	A	A	C	A	B	-	A	-	A	B	-	C	C	B	A	A	A	A	A	-	D	
Alcohol: Isopropyl	B	A	C	B	B	A	C	A	B	-	A	-	A	A	-	C	C	D	B	A	A	A	B	-	D	
Alcohol: Methyl	B	A	A	A	A	A	A	A	B	-	D	-	A	B	-	A	A	B	A	A	A	A	A	A	D	
Alcohol: Octyl	A	A	A	A	A	A	B	B	A	-	B	-	C	D	-	B	-	A	B	-	A	-	B	-	D	
Alcohol: Propyl	A	A	A	A	A	A	A	A	B	-	A	-	A	D	-	A	A	B	A	A	A	A	A	C	D	
Alcohols R-OH	-	-	-	-	-	A	-	-	-	-	-	-	A	-	-	-	-	A	-	A	-	A	-	A	-	
Alkaline Solutions	-	-	-	A	A	A	A	-	A	-	A	-	-	-	-	-	-	-	A	-	A	-	-	A	-	
Alkazene	-	-	-	-	-	-	D	-	-	A	A	-	-	D	-	D	D	-	D	-	A	-	D	B	D	
Allyl Alcohol	B	A	A	A	A	-	A	-	A	B	B	-	A	D	-	A	A	A	A	B	A	A	B	A	B	
Allyl Bromide	D	-	A	-	-	-	D	-	D	B	B	-	-	D	-	D	D	-	D	-	A	-	-	-	A	
Allyl Chloride	D	-	D	B	B	-	D	-	D	B	B	D	-	D	-	B	C	-	D	A	A	A	-	B	D	
Almond Oil (Artificial)	-	-	-	B	B	-	D	-	B	D	D	-	-	D	-	D	D	-	D	-	A	-	C	-	D	
Alum (Aluminum Potassium Sulfate)	C	-	D	B	-	A	A	-	A	D	A	-	B	D	-	A	A	C	A	A	A	A	A	A	D	
Aluminum Acetate (Buwro's Solution)	A	-	D	C	B	A	C	-	A	D	D	D	B	-	-	B	-	A	C	A	A	-	A	A	D	
Aluminum Ammonium Sulfate	-	-	-	-	-	-	-	-	A	-	A	-	-	-	-	A	A	-	A	A	A	A	B	-	-	
Aluminum Bromide	-	-	-	-	-	-	A	-	A	-	A	A	-	D	-	A	B	-	A	-	A	A	B	-	D	
Aluminum Chloride	D	D	D	D	C	B	A	B	A	A	A	A	A	C	-	A	A	D	A	A	A	A	A	A	B	

# CHEMICAL COMPATIBILITY FOR DIAPHRAGM PUMPS

CHEMICALS	METALS					PLASTICS, ELASTOMERS & LEATHER																					
	Aluminum	Carbon Steel	Cast/Ductile Iron	304 Stainless Steel	316 Stainless Steel	Acetal	Buna	CSM (Hypalon)	EPR, EPDM	Fluorocarbon	Fluoroelastomer (FKM)	Geolast (Buna & Polypropylene)	Hastelloy C	TPE	Leather	Nitrile (TS)	Nitrile (TPE)	Nylon	Polychloroprene	Polypropylene	PTFE	PVDF	Santoprene (EPDM & Polypropylene)	UHMWPE	Urethane		
A: Excellent, B: Good, C: Fair to Poor, D: Not recommended - No Data																											
Aluminum Chloride 20%	D	D	D	D	C	C	A	B	A	-	A	-	A	-	-	-	-	D	A	A	A	A	-	-	-		
Aluminum Chlorohydroxide	D	D	D	D	-	-	-	-	-	-	-	-	-	-	-	-	-	A	-	-	A	-	-	-	-		
Aluminum Fluoride	B	D	D	D	D	D	A	A	B	A	A	A	B	-	-	A	B	B	A	A	A	A	A	A	A	C	
Aluminum Hydroxide	B	A	D	B	C	A	B	A	A	C	A	A	B	D	-	A	A	B	A	A	A	A	A	A	A	B	
Aluminum Nitrate	D	-	D	A	A	B	A	A	A	A	A	A	B	-	-	A	A	B	A	A	A	A	A	A	A	C	
Aluminum Phosphate	-	-	-	A	A	A	A	-	A	A	A	-	-	-	-	A	A	-	A	A	A	A	A	A	-	D	
Aluminum Potassium Sulfate	C	D	D	D	B	C	A	A	A	A	A	A	C	D	-	A	A	D	A	A	A	A	A	A	A	D	
Aluminum Potassium Sulfate 10%	C	D	D	A	A	C	A	A	A	-	A	-	C	-	-	-	-	D	A	A	A	B	-	-	-		
Aluminum Sodium Sulfate (Soda Alum)	-	-	-	-	-	-	A	-	A	A	-	-	-	-	-	-	-	-	A	-	A	-	-	-	-		
Aluminum Sulfate	C	D	D	B	B	B	A	A	A	A	A	A	B	B	A	A	A	A	A	A	A	A	A	A	A	B	
Alums	A	D	D	-	A	-	A	-	A	-	D	A	B	D	-	-	-	A	B	A	A	A	-	-	-		
Amines	B	D	D	A	A	D	D	D	C	D	D	D	B	D	D	D	D	D	D	B	A	-	A	A	D		
Aminoethanol	-	-	-	-	-	D	-	-	-	-	-	-	-	-	-	-	-	A	-	A	A	C	-	-	-		
Ammonia 10%	A	A	A	A	A	D	A	D	A	-	D	A	A	-	-	-	-	A	A	A	A	A	-	-	-		
Ammonia Anhydrous	A	A	A	A	A	D	B	-	A	D	D	-	A	D	D	-	-	B	B	A	A	A	A	A	-		
Ammonia Aqueous	-	-	-	-	-	B	-	-	-	-	-	-	-	-	-	-	-	B	-	A	A	A	-	A	-		
Ammonia Gas — Cold	-	-	-	-	-	-	A	-	-	A	-	-	-	-	-	-	-	-	A	-	A	-	A	A	-		
Ammonia Gas — Hot	-	-	-	-	-	-	C	-	-	D	-	-	-	-	-	-	-	-	B	-	A	-	A	A	-		
Ammonia Liquids	D	-	A	A	-	D	-	-	A	-	D	-	B	-	-	B	B	-	A	A	A	A	A	D	B		
Ammonia Liquors	A	-	A	A	-	-	-	-	-	D	-	-	-	-	-	-	-	-	A	-	A	-	A	-	-		
Ammonia Nitrate	C	A	A	A	A	C	C	D	A	-	D	D	B	-	-	A	A	D	C	A	A	A	A	-	B		
Ammonia, anhydrous	B	A	D	B	A	D	C	D	A	-	D	D	B	D	-	B	B	B	A	A	A	D	A	A	-		
Ammonia, Gas (Cold)	-	-	-	-	-	A	A	-	A	-	D	-	-	D	-	A	B	-	A	B	A	D	A	-	B		
Ammonia, Gas (Hot)	-	-	-	-	-	-	C	-	-	-	D	-	-	-	-	-	-	-	B	-	A	-	-	-	-		
Ammonia, Liquids	D	-	A	-	A	-	B	-	-	-	D	-	B	-	-	-	-	B	A	A	A	A	-	-	-		
Ammonia, Water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Ammonium Acetate	B	-	A	B	A	C	B	-	A	A	A	B	-	D	-	A	A	A	A	A	A	-	A	A	D		
Ammonium Bicarbonate	B	-	B	-	-	-	A	-	B	A	D	-	-	-	-	A	B	-	A	-	A	-	B	A	C		
Ammonium Bifluoride	D	D	D	D	B	D	B	-	A	-	A	B	B	-	-	A	A	-	D	A	A	A	A	-	D		
Ammonium Carbonate	C	B	C	B	B	D	D	-	B	A	B	D	B	-	A	B	C	A	B	A	A	A	A	A	A		
Ammonium Casenite	-	-	-	A	A	D	-	-	-	-	-	-	-	-	-	-	-	-	A	-	A	-	A	-	-		
Ammonium Chloride	D	D	D	C	C	D	B	A	A	A	A	B	D	A	-	-	-	C	B	A	A	A	A	A	-		
Ammonium Chloride 1%	C	-	D	C	-	A	-	-	A	-	A	-	A	A	-	B	A	-	A	A	A	A	A	A	B		
Ammonium Cupric Sulfate	-	-	-	-	-	-	A	-	-	A	-	-	-	-	-	-	-	-	-	-	A	-	-	-	-		

# CHEMICAL COMPATIBILITY FOR DIAPHRAGM PUMPS

CHEMICALS	METALS					PLASTICS, ELASTOMERS & LEATHER																				
	Aluminum	Carbon Steel	Cast/Ductile Iron	304 Stainless Steel	316 Stainless Steel	Acetal	Buna	CSM (Hypalon)	EPR, EPDM	Fluorocarbon	Fluoroelastomer (FKM)	Geolast (Buna & Polypropylene)	Hastelloy C	TPE	Leather	Nitrile (TS)	Nitrile (TPE)	Nylon	Polychloroprene	Polypropylene	PTFE	PVDF	Santoprene (EPDM & Polypropylene)	UHMWPE	Urethane	
A: Excellent, B: Good, C: Fair to Poor, D: Not recommended - No Data																										
Ammonium Dichromate	A	-	A	-	-	-	A	-	A	-	-	A	-	-	-	A	B	-	A	-	A	-	A	-	-	-
Ammonium Diphosphate	-	-	-	-	-	-	-	-	A	-	A	-	-	D	-	A	-	-	A	-	A	-	A	-	-	-
Ammonium Fluoride	D	A	D	D	A	-	B	-	A	A	A	-	A	-	-	B	B	A	B	B	A	A	B	A	-	-
Ammonium Hydroxide	C	D	D	B	A	D	D	A	A	B	B	B	B	D	B	B	B	C	B	A	A	A	A	A	A	D
Ammonium Metaphosphate	B	-	B	B	-	-	A	-	A	A	-	-	A	-	-	-	-	-	A	A	A	A	-	A	-	-
Ammonium Nitrate	B	B	D	A	A	B	A	A	A	A	B	A	B	B	A	A	A	C	B	A	A	A	A	A	A	A
Ammonium Nitrite	-	-	-	A	-	-	A	-	A	-	A	-	-	-	-	A	A	-	A	A	A	A	A	A	A	D
Ammonium Oxalate	-	D	D	A	A	B	D	-	A	-	-	A	A	-	-	-	-	-	A	A	-	-	A	A	-	-
Ammonium Oxalate - 5% Sol.	-	-	D	A	-	B	-	-	A	-	-	-	A	-	-	A	B	-	A	-	A	-	A	A	-	-
Ammonium Persulfate	D	D	D	A	B	D	D	A	B	A	A	D	B	-	-	D	D	D	A	A	A	A	A	A	A	D
Ammonium Phosphate	B	-	D	A	A	B	A	-	A	-	A	-	A	B	-	A	A	D	A	A	A	A	A	A	B	B
Ammonium Phosphate, Dibasic	B	D	D	B	C	B	A	A	A	A	A	A	B	-	-	-	-	D	A	A	A	A	A	-	-	
Ammonium Phosphate, Monobasic	D	D	D	B	C	B	A	A	A	A	A	A	B	B	-	-	-	B	A	A	A	A	A	A	-	-
Ammonium Phosphate, Tribasic	D	D	D	B	B	B	A	A	A	A	A	A	B	-	-	-	-	B	A	A	A	A	A	-	-	
Ammonium Sulfamate	-	-	-	-	-	-	-	-	A	-	A	-	-	B	-	A	A	-	A	-	A	-	A	-	A	-
Ammonium Sulfate	D	D	D	B	B	B	A	A	A	A	D	A	B	C	-	A	A	B	A	A	A	A	A	A	A	A
Ammonium Sulfide	B	-	-	B	-	-	A	-	A	A	D	A	A	-	-	A	-	-	A	-	A	-	-	A	B	-
Ammonium Sulfite	D	D	D	B	B	D	A	A	A	A	D	A	A	B	-	A	A	A	A	A	A	-	A	D	D	-
Ammonium Sulphate 1% - 5%	B	-	C	A	-	A	-	-	-	-	D	-	B	C	-	A	A	-	A	A	A	A	-	A	B	-
Ammonium Thiocyanate	C	-	C	A	-	-	A	-	A	A	A	-	A	-	-	A	-	-	A	-	A	A	-	A	-	-
Ammonium Thiophosphate	-	-	-	-	-	-	-	-	A	-	A	-	-	D	-	A	A	-	A	-	A	-	A	-	-	-
Ammonium Thiosulfate	A	D	D	A	A	B	A	-	A	A	A	A	-	-	-	A	A	-	A	-	A	-	A	-	-	-
Amyl Acetate (Banana Oil)	B	C	C	A	A	D	D	D	A	D	D	-	B	C	B	D	D	C	D	D	A	A	D	B	D	
Amyl Alcohol	B	-	-	A	-	A	B	-	-	B	-	-	A	-	-	-	-	A	B	B	A	A	A	A	-	-
Amyl Alcohol	B	B	C	A	A	A	B	A	A	A	B	-	B	A	-	B	B	B	B	B	A	A	B	A	D	-
Amyl Borate	-	-	-	-	-	-	A	-	D	A	A	-	-	-	-	B	-	-	B	-	A	-	B	-	D	-
Amyl Chloranaphthalene	-	-	-	-	-	-	-	-	D	-	A	-	-	-	-	B	C	-	D	-	A	-	C	-	D	-
Amyl Chloride (Chloropentane)	D	A	A	A	A	A	D	D	D	A	B	D	B	D	-	D	D	D	D	D	A	A	C	D	C	-
Amyl Chloronaphthalene	-	-	-	-	-	-	B	-	-	A	A	-	-	-	-	-	-	-	D	-	A	-	C	-	-	-
Amyl Naphthalene	-	-	-	-	-	-	D	-	D	A	A	-	-	D	-	D	D	-	D	-	A	-	C	-	D	-
Amyl Naphthalene	-	-	-	-	-	-	D	-	-	-	A	-	-	-	-	-	-	-	D	-	A	-	-	-	-	-
Amyl Phenol	A	-	A	A	-	-	D	-	-	A	A	-	A	-	-	D	-	-	-	-	A	-	C	-	-	-
AN-0-3 Grade M	-	-	-	-	-	-	-	-	B	-	A	-	-	D	-	A	B	-	D	-	A	-	B	-	B	-
AN-0-366	-	-	-	-	-	-	-	-	C	-	A	-	-	D	-	A	B	-	D	-	A	-	-	-	D	-

# CHEMICAL COMPATIBILITY FOR DIAPHRAGM PUMPS

CHEMICALS	METALS					PLASTICS, ELASTOMERS & LEATHER																				
	Aluminum	Carbon Steel	Cast/Ductile Iron	304 Stainless Steel	316 Stainless Steel	Acetal	Buna	CSM (Hypalon)	EPR, EPDM	Fluorocarbon	Fluoroelastomer (FKM)	Geolast (Buna & Polypropylene)	Hastelloy C	TPE	Leather	Nitrile (TS)	Nitrile (TPE)	Nylon	Polychloroprene	Polypropylene	PTFE	PVDF	Santoprene (EPDM & Polypropylene)	UHMWPE	Urethane	
A: Excellent, B: Good, C: Fair to Poor, D: Not recommended  - No Data																										
AN-0-6	-	-	-	-	-	-	-	-	A	-	A	-	-	D	-	A	B	-	A	-	A	-	-	-	-	D
Anderol, L-774 (Di-Ester)	-	-	-	-	-	-	-	-	D	-	A	-	-	-	-	A	-	-	D	-	A	-	-	-	-	D
Anderol, L-826 (Di-Ester)	-	-	-	-	-	-	-	-	D	-	A	-	-	D	-	B	D	-	D	-	A	-	D	-	-	D
Anderol, L-829 (Di-Ester)	-	-	-	-	-	-	-	-	D	-	A	-	-	D	-	B	D	-	D	-	A	-	D	-	-	D
ANG-25 (Di-Ester Base) (TG7449)	-	-	-	-	-	-	-	-	D	-	A	-	-	-	-	B	D	-	D	-	A	-	D	-	-	D
ANG-25 (Glycerol Ester)	-	-	-	-	-	-	-	-	A	-	A	-	-	-	-	B	D	-	B	-	A	-	-	-	-	D
Anhydrous Hydrazine	-	-	-	-	-	-	-	-	B	-	D	-	-	-	-	D	D	-	B	-	A	-	-	-	-	D
Anhydrous Hydrogen Fluoride	-	-	-	-	-	-	-	-	A	-	D	-	-	-	-	D	D	-	-	-	A	-	C	-	-	D
Aniline	C	C	C	A	B	B	D	D	D	B	D	-	B	D	-	D	D	C	D	C	A	C	B	C	C	D
Aniline Dyes	B	-	C	B	B	D	C	-	C	B	A	D	-	D	-	C	D	-	C	-	A	-	B	C	C	D
Aniline Hydrochloride	D	D	D	D	D	-	D	-	B	B	B	D	D	-	-	C	D	D	D	D	A	B	A	C	C	D
Aniline Sulfite	-	-	-	C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Animal Fats & Oils	A	A	D	A	A	A	A	-	B	A	A	-	A	B	-	A	B	-	C	A	A	A	C	A	C	C
Anisole (Methylphenyl Ether)	B	-	B	B	-	-	-	-	-	D	-	-	B	-	-	-	-	-	D	-	A	-	-	C	-	
Ansul Ether	-	-	-	-	-	-	C	-	C	D	D	-	-	D	-	C	D	-	D	-	A	-	D	-	B	
Anthraquinone	B	-	B	B	-	-	-	-	C	-	D	-	A	D	-	C	D	-	D	-	A	-	D	-	B	
Anti-Freeze (Alcohol Base)	A	A	A	A	A	D	A	-	A	A	A	-	A	B	-	-	-	D	C	D	A	-	A	-	-	
Anti-Freeze (Glycol Base)	A	A	A	A	A	B	A	-	A	A	A	A	A	B	-	A	A	-	B	A	A	A	A	A	A	B
Antimony Trichloride	B	-	A	A	-	-	-	-	B	-	A	-	B	D	-	B	-	-	C	A	A	A	A	A	A	D
Antimony Chloride	B	-	A	A	-	-	-	-	A	-	B	-	B	D	-	B	B	-	D	A	A	A	A	A	A	-
Antimony Pentachloride	A	-	A	A	-	-	D	-	-	-	-	D	A	-	-	-	-	-	-	-	A	-	-	A	-	
Antimony Trichloride	D	-	D	D	D	-	B	-	B	A	A	B	B	-	-	-	-	D	-	A	A	A	-	A	-	
AN-VV-0-366b Hydr. Fluid	-	-	-	-	-	-	-	-	D	-	A	-	-	D	-	A	D	-	C	-	A	-	D	-	D	
Aqua Regia (80%, Hci, 20% Hno3)	D	D	D	D	D	D	D	C	D	B	C	D	D	D	-	D	D	D	D	D	A	A	D	B	D	
Arsenic Acid	D	-	D	A	-	D	-	-	A	-	A	-	B	D	-	A	A	-	B	A	A	A	A	A	C	
Arsenic Trichloride	D	-	D	D	-	D	-	-	D	-	A	-	B	D	-	A	B	-	A	-	A	-	B	-	-	
Argon	-	-	-	-	-	-	-	-	A	-	A	-	-	A	-	A	A	-	D	-	A	-	A	-	A	
Arochlor 1248	A	B	B	B	B	-	D	D	B	-	A	D	A	C	-	-	-	B	D	D	A	-	-	-	-	
Aroclor	A	-	B	B	B	-	C	-	D	A	A	-	A	C	-	D	D	A	D	D	A	-	D	-	B	
Aromatic Fuel 50%	-	-	-	-	-	-	-	-	D	-	A	-	-	-	-	A	-	-	D	-	A	-	C	-	D	
Aromatic Hydrocarbons	A	A	B	A	C	A	D	D	D	A	A	D	-	C	-	D	D	A	D	D	A	-	C	-	D	
Aromatic Solvents (Benzene Etc.)	A	-	B	A	-	-	C	-	D	B	-	-	B	-	-	-	-	-	D	-	A	-	-	-	-	
Arsenic Acid	D	D	D	B	A	D	B	A	A	A	A	A	B	-	B	-	-	D	A	A	A	A	A	-	-	
Arsenic Salts	-	-	-	-	-	-	-	-	-	-	A	-	-	B	-	-	-	A	-	-	-	-	-	-	-	

# CHEMICAL COMPATIBILITY FOR DIAPHRAGM PUMPS

CHEMICALS	METALS					PLASTICS, ELASTOMERS & LEATHER																				
	Aluminum	Carbon Steel	Cast/Ductile Iron	304 Stainless Steel	316 Stainless Steel	Acetal	Buna	CSM (Hypalon)	EPR, EPDM	Fluorocarbon	Fluoroelastomer (FKM)	Geolast (Buna & Polypropylene)	Hastelloy C	TPE	Leather	Nitrile (TS)	Nitrile (TPE)	Nylon	Polychloroprene	Polypropylene	PTFE	PVDF	Santoprene (EPDM & Polypropylene)	UHMWPE	Urethane	
A: Excellent, B: Good, C: Fair to Poor, D: Not recommended																										
- No Data																										
Arsenic Trichloride	D	-	D	D	D	-	C	-	D	D	D	D	B	-	-	-	-	-	A	-	A	-	B	A	-	
Ascorbic Acid	A	-	D	A	-	-	-	-	-	A	-	-	-	-	-	-	-	-	-	-	A	-	-	-	-	
Askarel	-	-	-	A	-	-	B	-	D	C	A	B	-	D	-	B	C	-	D	-	A	-	D	-	D	
Asorbic Acid	A	-	D	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	-	A	-	-	-	-	
Asphalt	C	A	B	B	A	B	B	D	D	-	A	B	-	B	A	B	B	A	D	B	A	A	B	-	B	
Asphalt Emulsions	B	-	A	A	A	-	-	-	D	-	A	-	A	B	-	B	B	C	B	-	A	A	B	A	B	
Asphalt Hydrocarbons	A	-	B	A	-	B	B	-	D	A	-	-	-	-	-	-	-	A	C	A	A	A	B	-	-	
Asphalt Sealer	-	-	-	-	-	-	-	-	-	-	-	D	-	-	-	-	-	-	-	-	-	-	-	-	-	
Asphalt Topping	A	-	A	A	-	D	-	-	D	-	A	-	A	B	-	B	B	-	B	D	A	D	B	A	B	
Asphalt Topping Hydrocarbons	-	-	A	A	-	-	C	-	-	C	-	-	-	-	-	-	-	-	A	-	A	-	-	-	-	
ASTM — Ref #1 Oil (High Aniline)	A	-	A	A	-	A	A	-	D	A	A	A	A	A	-	A	C	-	B	-	A	-	C	A	B	
ASTM — Ref #2 Oil (Medium Aniline)	A	-	A	A	-	A	A	-	D	A	A	A	A	A	-	A	-	-	B	-	A	-	C	A	D	
ASTM — Ref #3 Oil (Low Aniline)	A	-	A	A	-	A	A	-	D	A	A	A	A	A	-	A	C	-	C	-	A	-	C	A	D	
ASTM — Ref #4 Oil (High Aniline)	A	-	A	A	-	A	B	-	D	A	A	B	A	D	-	B	-	-	D	-	A	-	-	A	D	
ASTM — Ref Motor Fuel A (Aliphatic)	A	-	A	A	-	-	A	-	D	A	A	A	A	A	-	A	B	-	B	-	A	-	B	-	D	
ASTM — Ref Motor Fuel B (30% Aromatic)	A	-	A	A	-	-	A	-	D	A	A	A	A	A	-	D	B	-	D	-	A	-	C	-	D	
ASTM — Ref Motor Fuel C (50% Aromatic)	A	-	A	A	-	-	B	-	D	A	A	B	A	A	-	B	C	-	D	-	A	-	C	-	D	
Atlantic Dominion F	-	-	-	-	-	-	-	-	D	-	A	-	-	D	-	B	-	-	B	-	A	-	C	-	D	
Atmosphere, Industrial	A	-	C	B	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Atmosphere, Marine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Atmosphere, Rural	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Aurex 903R (Mobile)	-	-	-	-	-	-	-	-	D	-	A	-	-	D	-	A	-	-	B	-	A	-	-	-	A	
Automatic Brake Fluid	A	A	A	A	A	A	D	-	A	-	D	-	-	-	-	-	-	-	B	-	A	-	C	-	-	
Automatic Transmission Fluid	A	A	A	A	A	A	A	-	D	-	A	-	A	A	-	A	-	-	B	-	A	-	D	-	B	
Automotive Gasoline (Standard)	A	A	A	A	A	A	A	-	D	-	A	-	-	-	-	-	-	-	D	-	A	-	-	-	-	
Aviation Gasoline	A	A	A	A	A	-	B	-	D	A	A	A	A	D	-	A	B	-	C	-	A	-	-	-	D	
Banana Oil	-	-	-	A	A	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	-	-	-	-	
Barbeque Sauce	-	D	D	A	A	-	A	-	-	-	-	A	-	-	-	-	-	-	A	-	A	-	-	-	-	
Bardol B	-	-	-	-	-	-	-	-	D	-	A	-	-	D	-	D	D	-	-	-	A	-	D	-	-	
Barium Carbonate	D	A	B	B	B	A	A	-	A	A	A	A	B	-	A	A	A	B	A	A	A	A	A	B	B	
Barium Chloride	D	C	D	B	C	A	A	A	A	-	A	A	B	B	-	A	A	B	A	A	A	A	A	B	A	
Barium Cyanide	C	C	C	A	A	B	C	A	A	A	A	D	A	-	-	C	D	A	C	D	A	-	A	-	-	
Barium Hydroxide	D	D	D	B	B	D	A	A	A	A	A	A	B	B	B	A	A	B	A	B	A	A	A	A	A	
Barium Nitrate	B	A	A	B	B	B	A	-	A	-	A	A	A	-	-	A	A	B	A	A	A	A	A	B	B	

# CHEMICAL COMPATIBILITY FOR DIAPHRAGM PUMPS

CHEMICALS	METALS					PLASTICS, ELASTOMERS & LEATHER																				
	Aluminum	Carbon Steel	Cast/Ductile Iron	304 Stainless Steel	316 Stainless Steel	Acetal	Buna	CSM (Hypalon)	EPR, EPDM	Fluorocarbon	Fluoroelastomer (FKM)	Geolast (Buna & Polypropylene)	Hastelloy C	TPE	Leather	Nitrile (TS)	Nitrile (TPE)	Nylon	Polychloroprene	Polypropylene	PTFE	PVDF	Santoprene (EPDM & Polypropylene)	UHMWPE	Urethane	
A: Excellent, B: Good, C: Fair to Poor, D: Not recommended  - No Data																										
Barium Sulfate	D	B	B	B	B	B	A	A	A	A	A	A	A	D	A	A	A	B	A	B	A	A	A	A	A	A
Barium Sulfide	D	D	D	B	B	A	A	A	A	A	A	A	A	-	A	A	A	B	A	B	A	A	A	B	A	
Bayol 35	-	-	-	-	-	-	-	-	D	-	A	-	-	-	-	D	D	-	A	-	A	-	D	-	-	
Bayol D	-	-	-	-	-	-	-	-	D	-	A	-	-	-	-	D	D	-	A	-	A	-	D	-	-	
Beef Extract	-	-	D	A	-	-	A	-	-	A	A	-	-	-	-	A	A	-	A	-	A	-	A	-	-	
Beer	A	D	D	A	A	A	C	A	A	A	A	A	A	B	A	-	-	B	A	B	A	A	A	A	-	
Beer (Alcohol Ind.)	A	A	A	A	A	A	B	-	A	-	A	-	-	-	A	-	-	A	A	-	A	-	-	-	-	
Beer (Beverage Ind.)	A	D	D	A	A	A	A	-	A	-	A	-	-	-	A	-	-	A	A	-	A	-	-	-	-	
Beet Sugar	-	-	-	-	-	-	-	-	-	-	-	A	-	-	-	-	-	-	-	-	-	-	-	-	-	
Beet Sugar Liquids	A	A	A	A	A	B	A	A	A	-	A	-	-	-	-	-	-	A	B	B	A	A	-	-	-	
Beet Sugar Liquors	A	B	B	A	A	A	A	-	A	-	A	-	-	B	A	-	-	A	B	-	A	-	-	-	-	
Beet Sugar Liquors (Sucrose)	A	-	B	A	-	B	A	-	A	A	-	-	-	-	-	-	-	A	A	A	A	A	A	-	-	
Benzaldehyde	B	A	A	B	B	A	D	D	B	D	D	D	A	B	-	D	D	D	D	D	A	A	D	C	D	
Benzene	B	A	B	B	B	A	D	D	D	B	B	D	B	C	B	D	C	A	D	D	A	B	D	D	D	
Benzene Hot	B	-	B	B	B	C	-	-	-	-	-	-	-	D	-	-	-	D	-	D	A	B	D	D	-	
Benzene Sulfonic Acid	D	-	D	B	B	C	D	-	D	A	B	D	B	B	-	D	D	D	B	D	A	B	A	D	D	
Benzoic Acid	B	D	D	B	B	B	D	D	D	A	A	A	B	D	A	D	D	D	D	D	A	A	A	A	D	
Benzol	B	A	B	A	A	A	D	D	D	-	D	-	B	C	-	D	D	D	D	D	A	A	C	D	D	
Benzol, Alcohol	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Benzonitrile	-	-	-	D	D	-	-	-	-	-	-	-	C	-	-	-	-	A	-	-	A	-	-	-	-	
Benzoyl Chloride	D	-	A	B	-	-	D	-	D	B	-	-	B	-	-	-	-	-	D	-	A	A	-	-	-	
Benzyl	-	-	-	-	-	-	-	-	-	-	-	D	-	-	-	-	-	-	-	-	-	-	-	-	-	
Benzyl Acetate	A	-	A	A	-	-	D	-	-	D	D	D	B	D	-	D	-	-	-	-	A	-	-	C	-	
Benzyl Alcohol (Phenylcarbinol)	B	-	-	A	-	-	D	-	-	A	-	-	A	-	-	-	-	-	B	A	A	A	A	A	-	
Benzyl Alcohol	A	A	A	A	A	-	D	-	C	A	A	-	B	C	-	D	D	D	C	A	A	A	D	A	D	
Benzyl Benzoate	A	-	B	B	B	-	D	-	B	A	A	D	B	D	-	D	-	-	D	-	A	-	C	-	D	
Benzyl Chloride	D	A	D	C	B	A	D	D	D	A	C	D	C	D	-	D	D	A	D	D	A	C	C	A	D	
Benzyl Dichloride (Benzal Chloride)	D	-	B	A	-	-	D	-	-	-	-	D	B	-	-	-	-	-	-	-	A	-	-	-	-	
Bichloride of Mercury	-	-	-	-	-	-	-	-	A	-	A	-	-	-	-	A	B	-	A	-	A	-	B	-	A	
Biphenyl (Diphenyl)	A	-	A	-	-	-	D	-	D	A	A	D	-	-	-	D	D	-	D	-	A	-	D	-	D	
Bismuth Subcarbonate	-	-	-	B	-	-	A	-	A	A	-	A	-	D	-	A	-	-	D	-	A	-	D	A	D	
Black Point 77	-	-	-	B	-	-	-	-	A	-	A	-	-	-	-	A	-	-	C	-	A	-	-	-	C	
Black Sulfate Liquor	C	-	B	A	-	-	B	-	B	A	B	B	B	B	-	B	-	-	B	-	A	A	-	A	D	
Blast Furnace Gas	-	-	-	-	-	D	C	-	D	A	A	-	-	B	-	D	-	-	D	-	A	-	A	A	D	

# CHEMICAL COMPATIBILITY FOR DIAPHRAGM PUMPS

CHEMICALS	METALS					PLASTICS, ELASTOMERS & LEATHER																				
	Aluminum	Carbon Steel	Cast/Ductile Iron	304 Stainless Steel	316 Stainless Steel	Acetal	Buna	CSM (Hypalon)	EPR, EPDM	Fluorocarbon	Fluoroelastomer (FKM)	Geolast (Buna & Polypropylene)	Hastelloy C	TPE	Leather	Nitrile (TS)	Nitrile (TPE)	Nylon	Polychloroprene	Polypropylene	PTFE	PVDF	Santoprene (EPDM & Polypropylene)	UHMWPE	Urethane	
A: Excellent, B: Good, C: Fair to Poor, D: Not recommended																										
- No Data																										
Bleach Liquor	-	-	-	-	-	-	D	-	A	-	A	-	-	-	-	-	-	-	B	-	-	-	-	-	-	
Bleach Solutions	D	-	D	B	-	D	D	-	A	B	B	D	B	C	-	D	D	-	D	D	A	A	B	B	D	
Bleaching Liquors	-	-	-	-	-	-	D	A	A	-	A	-	-	-	-	-	-	C	D	A	A	-	-	-	-	
Bleaching Powder (Wet)	-	-	-	A	D	-	A	-	-	-	-	-	-	-	-	-	-	A	-	-	A	-	-	-	-	
Blood	-	-	-	A	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	A	-	-	-	-	
Blood (Meat Juices - Cold)	A	-	D	B	A	-	B	-	A	-	C	-	-	D	-	C	D	-	A	A	A	-	B	A	D	
Borax (Sodium Borate)	D	A	D	A	A	B	B	A	A	A	A	B	B	B	A	B	A	A	D	B	A	A	A	A	A	
Bordeaux Mixtures	D	-	C	A	A	-	A	-	A	B	A	-	A	B	-	A	B	-	A	-	A	-	A	A	D	
Boric Acid	D	D	D	B	A	C	A	A	A	A	A	A	A	B	A	A	A	B	D	A	A	A	A	A	A	
Boron Fluids (HEF)	-	-	-	-	-	-	-	-	D	-	A	-	-	D	-	B	C	-	D	-	A	-	D	-	A	
Brake Fluid (Non-Petroleum Base)	A	A	A	A	A	A	D	-	A	-	D	D	A	D	-	C	D	B	B	D	A	-	B	A	A	
Brewery Slop	-	A	A	A	A	B	A	-	A	A	A	A	-	D	-	A	-	-	A	-	A	-	A	-	A	
Brine (Calcium Chloride)	C	-	D	A	-	A	A	-	A	-	A	-	A	B	-	A	A	-	B	A	A	A	A	A	B	
Brine (Sodium Chloride)	-	-	D	A	-	-	A	-	A	A	-	-	A	-	-	-	-	-	B	A	A	A	-	A	-	
Bromine	D	-	D	D	D	D	D	D	D	A	A	D	A	D	-	D	D	D	D	D	A	A	C	D	D	
Bromine Dry Gas	D	-	D	D	D	D	-	-	-	-	-	-	-	D	-	-	-	D	-	D	A	A	-	D	-	
Bromine Moist Gas	D	-	D	D	D	D	-	-	-	-	-	-	-	-	-	-	-	D	-	D	A	A	-	-	-	
Bromine Trifluoride	D	-	D	B	-	D	D	-	D	D	D	D	-	D	-	D	D	-	D	D	A	-	C	-	D	
Bromine Water	D	-	D	D	-	D	D	-	D	B	B	D	A	D	-	D	D	-	D	D	A	A	B	D	D	
Bromine-Anhydrous	D	-	D	D	D	D	-	-	D	-	A	-	A	D	-	D	D	D	D	D	A	A	C	D	D	
Bromine-Pentafluoride	-	-	-	-	-	-	-	-	D	-	D	-	-	-	-	D	D	-	D	-	A	-	D	-	D	
Bromine-Trifluoride	D	-	D	-	B	-	D	-	-	-	D	-	-	-	-	-	-	-	D	D	A	-	-	-	-	
Bromine-Vapor	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Bromine-Water	D	-	D	-	B	-	-	-	-	-	A	-	-	-	-	-	-	-	B	D	A	A	-	-	-	
Bromobenzene	D	-	B	B	B	D	D	-	D	B	B	D	B	D	-	D	D	-	D	D	A	A	D	D	D	
Bromochloro Trifluoromethane	-	-	-	-	-	-	-	-	D	-	A	-	-	-	-	D	-	-	D	-	A	-	D	-	D	
Bromochloromethane	D	-	B	B	-	-	D	-	B	C	C	D	B	-	-	D	-	-	D	-	A	-	-	-	D	
Bromotoluene	D	-	A	A	-	-	D	-	-	B	B	D	A	-	-	D	-	-	-	-	A	-	-	-	-	
Bronzing Liquid	-	-	-	A	-	-	D	-	B	D	D	D	A	-	-	A	-	-	D	-	A	-	A	-	D	
Bunker Oil	A	-	A	A	A	-	A	-	D	-	A	-	A	D	-	A	B	-	D	-	A	-	B	A	D	
Bunker Oil (Fuel) #5, #6 & C Hydrocarbons	A	-	A	A	-	-	A	-	D	A	-	-	A	-	-	-	-	-	B	-	A	-	B	-	-	
Bunker Oil (Fuel) #5,#6 & C (Hydrocarbons)	-	-	-	-	-	-	-	-	-	-	-	A	-	-	-	-	-	-	-	-	-	-	-	-	-	
Butadiene	A	A	A	A	A	A	D	B	D	C	B	D	C	D	A	D	D	C	D	D	A	A	D	D	D	
Butane	A	A	A	A	A	B	A	B	D	A	A	A	A	B	A	A	A	B	B	D	A	A	D	D	D	



# CHEMICAL COMPATIBILITY FOR DIAPHRAGM PUMPS

CHEMICALS	METALS					PLASTICS, ELASTOMERS & LEATHER																				
	Aluminum	Carbon Steel	Cast/Ductile Iron	304 Stainless Steel	316 Stainless Steel	Acetal	Buna	CSM (Hypalon)	EPR, EPDM	Fluorocarbon	Fluoroelastomer (FKM)	Geolast (Buna & Polypropylene)	Hastelloy C	TPE	Leather	Nitrile (TS)	Nitrile (TPE)	Nylon	Polychloroprene	Polypropylene	PTFE	PVDF	Santoprene (EPDM & Polypropylene)	UHMWPE	Urethane	
A: Excellent, B: Good, C: Fair to Poor, D: Not recommended  - No Data																										
Butanol (Butyl Alcohol)	B	-	B	A	A	A	A	A	A	-	A	-	B	B	-	A	B	B	A	B	A	A	B	A	D	
Butraldehyde	-	-	-	-	-	-	D	-	-	-	D	-	-	-	-	-	-	-	C	D	A	B	-	-	-	
Butter	A	D	D	C	A	A	A	B	A	-	A	A	-	B	-	A	A	A	B	A	A	A	D	A	A	
Buttermilk	A	D	D	A	A	A	A	-	A	A	A	A	A	-	A	A	A	B	D	A	A	A	A	A	A	
Butyl	-	-	-	-	-	-	-	-	-	-	-	A	-	-	-	-	-	-	-	-	-	-	-	-	-	
Butyl Acetate	A	A	A	B	C	B	D	D	D	D	D	D	B	C	-	D	B	A	D	D	A	B	B	B	D	
Butyl Acetyl Ricinoleate	A	-	A	A	A	-	C	-	C	B	A	D	A	-	-	C	D	-	D	-	A	-	B	-	D	
Butyl Acrylate	-	-	-	-	-	A	D	-	D	D	D	D	-	D	-	D	D	-	D	D	A	C	C	A	-	
Butyl Alcohol (Butanol)	B	-	-	A	-	A	A	-	-	A	-	-	A	-	-	-	-	B	A	B	A	A	A	A	-	
Butyl Alcohol	A	-	B	A	-	-	A	-	B	A	A	-	A	B	-	A	A	-	A	A	A	A	A	A	D	
Butyl Amine	A	-	A	A	A	D	C	-	D	D	D	D	B	D	-	B	B	A	D	D	A	B	D	A	D	
Butyl Benzoate	B	-	B	B	B	A	-	-	B	A	A	-	B	-	-	D	-	-	D	-	A	-	C	-	D	
Butyl Bromide	-	-	-	-	-	-	D	-	-	B	-	-	-	-	-	-	-	-	-	-	A	A	-	-	-	
Butyl Butyrate	A	-	A	A	-	-	D	-	A	D	-	D	A	D	-	D	-	-	D	-	A	-	C	-	-	
Butyl Carbitol	-	-	-	-	-	A	A	-	A	A	C	A	-	-	-	D	D	-	C	-	A	-	B	-	D	
Butyl Cellosolve	-	-	-	-	-	A	B	-	A	C	D	-	-	-	-	C	D	-	C	-	A	B	A	-	D	
Butyl Chloride	D	-	B	B	-	-	D	-	-	A	A	-	B	C	-	D	D	A	C	D	A	A	D	-	-	
Butyl Ether	B	-	B	B	A	D	B	-	D	C	D	A	B	D	-	A	-	A	D	D	A	A	D	A	-	
Butyl Oleate	-	-	-	-	-	A	-	-	C	A	A	-	-	-	-	D	D	-	D	-	A	-	C	-	-	
Butyl Phthalate	B	-	-	B	B	-	D	D	B	-	C	D	B	B	-	-	-	A	D	B	A	D	-	A	-	
Butyl Stearate	B	-	B	B	B	A	A	-	D	B	A	A	B	-	-	B	C	-	D	-	A	A	C	A	B	
Butylene	A	-	-	A	A	A	B	D	D	-	A	A	-	D	-	A	C	B	D	D	A	A	D	-	C	
Butylene (Butene)	A	-	-	A	-	-	B	-	D	B	-	-	-	-	-	-	-	B	D	D	A	A	D	-	-	
Butyraldehyde	A	-	A	A	-	A	D	-	C	D	D	D	A	D	-	D	D	-	D	D	A	B	C	C	D	
Butyric Acid	B	D	D	B	B	D	D	D	C	C	B	D	A	B	-	D	D	C	D	B	A	A	A	B	D	
Butyric Acid 5%	-	-	-	-	-	D	-	-	-	-	-	-	-	-	A	-	-	B	-	A	A	B	-	A	-	
Butyric Acid Concentrated	-	-	-	-	-	D	-	-	-	-	-	-	-	B	-	-	-	D	-	D	A	B	D	B	-	
Butyric Acid, Aqueous	B	-	-	-	A	-	D	-	-	-	D	-	A	-	-	-	-	B	D	A	A	A	-	-	-	
Butyric Anhydride	A	-	A	A	-	-	-	-	-	-	-	D	A	-	-	C	-	-	-	-	A	-	A	D	-	
Butyronitrile	-	-	-	-	-	-	D	-	A	-	C	D	-	D	-	D	-	-	D	-	A	-	-	-	-	
Cadmium Sulfate (25% Concentration)	-	-	-	-	-	-	-	-	-	-	-	-	-	D	-	C	-	-	-	-	A	-	-	-	D	
Caffeine Citrate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Calcium Acetate (Hydrate)	C	-	C	B	-	-	B	-	A	D	D	B	B	D	-	B	-	-	C	-	A	-	-	-	D	
Calcium Acid Sulphate	-	-	-	-	-	-	-	-	B	-	D	-	-	-	-	C	-	-	C	-	A	-	-	-	-	

# CHEMICAL COMPATIBILITY FOR DIAPHRAGM PUMPS

CHEMICALS	METALS					PLASTICS, ELASTOMERS & LEATHER																				
	Aluminum	Carbon Steel	Cast/Ductile Iron	304 Stainless Steel	316 Stainless Steel	Acetal	Buna	CSM (Hypalon)	EPR, EPDM	Fluorocarbon	Fluoroelastomer (FKM)	Geolast (Buna & Polypropylene)	Hastelloy C	TPE	Leather	Nitrile (TS)	Nitrile (TPE)	Nylon	Polychloroprene	Polypropylene	PTFE	PVDF	Santoprene (EPDM & Polypropylene)	UHMWPE	Urethane	
A: Excellent, B: Good, C: Fair to Poor, D: Not recommended																										
- No Data																										
Calcium Bisulfate	-	D	D	-	A	-	A	-	A	-	A	A	-	-	-	A	A	-	C	-	A	-	-	-	A	
Calcium Bisulfide	C	-	D	B	B	D	A	-	D	-	A	A	A	B	-	A	A	A	A	A	A	A	D	-	A	
Calcium Bisulfite	D	-	D	B	A	D	B	A	D	A	A	A	B	D	A	A	A	A	A	B	A	D	D	A	A	
Calcium Carbonate (Chalk)	D	-	B	B	B	A	A	A	A	A	A	A	B	-	A	A	A	A	A	A	A	A	A	A	D	
Calcium Chlorate	B	-	B	B	-	A	A	B	A	A	A	A	B	-	-	A	A	-	A	A	A	A	A	A	B	
Calcium Chloride	D	C	C	C	C	D	A	A	A	-	A	A	A	A	-	-	-	B	A	A	A	A	-	-	-	
Calcium Chloride (Brine)	C	-	C	C	-	D	A	-	A	A	A	-	A	A	-	A	A	B	A	A	A	A	A	A	A	
Calcium Chloride Dilute	-	-	-	-	-	C	-	-	-	-	-	-	-	B	-	-	-	A	-	A	A	A	-	A	-	
Calcium Chloride Saturated	-	A	A	A	A	D	A	-	A	-	A	-	-	B	A	-	-	B	A	A	A	A	-	A	-	
Calcium Hydrosulfide (Calcium Sulfhydrate)	-	-	-	-	-	-	A	-	A	A	A	-	-	-	-	A	-	-	A	-	A	-	A	A	-	
Calcium Hydroxide	C	A	A	B	B	D	A	A	A	-	A	-	A	B	-	-	-	A	A	A	A	A	-	-	-	
Calcium Hydroxide - 10% (Boiling)	C	-	A	A	-	A	-	-	A	-	A	-	A	B	-	A	A	-	A	A	A	A	A	D	A	
Calcium Hydroxide (Slaked Lime)	D	-	B	B	-	D	A	-	A	A	-	A	A	-	-	-	-	B	A	A	A	A	A	-	-	
Calcium Hydroxide 10%	-	A	A	A	A	A	A	-	A	-	A	-	-	B	A	-	-	A	A	A	A	A	-	D	-	
Calcium Hydroxide 20%	-	-	-	A	A	D	-	-	-	-	-	-	-	B	-	-	-	A	-	A	A	A	-	D	-	
Calcium Hydroxide 30%	-	-	-	A	A	D	-	-	-	-	-	-	-	B	-	-	-	A	-	A	A	A	-	A	-	
Calcium Hypochlorite	D	D	D	C	C	D	C	A	B	-	A	-	B	C	D	C	C	D	D	A	A	A	A	A	D	
Calcium Hypochlorite 2% Boiling	D	-	C	C	B	D	-	-	-	-	-	-	-	C	-	-	-	D	-	A	A	A	-	D	-	
Calcium Hypochlorite 20% (Calcium Oxichloride)	D	-	D	B	-	A	C	-	B	B	-	-	B	-	-	-	-	A	D	A	A	A	A	-	-	
Calcium Hypochlorite, 20%(Calcium Oxichloride)	-	-	-	-	-	-	-	-	-	-	-	D	-	-	-	-	-	-	-	-	-	-	-	-	-	
Calcium Nitrate	B	B	C	C	B	D	A	A	B	A	A	A	B	-	-	B	C	D	B	A	A	A	A	A	D	
Calcium Nitrite	-	-	-	A	A	D	A	-	A	-	A	-	-	-	-	-	-	C	A	A	A	A	-	-	-	
Calcium Oxide	C	-	-	A	A	A	A	A	A	-	B	A	A	A	-	-	-	B	A	A	A	A	-	-	-	
Calcium Oxide (Unslaked Lime)	A	-	A	A	-	-	A	-	A	-	A	-	A	B	-	A	A	-	A	-	A	-	A	A	B	
Calcium Silicate	A	-	B	A	-	-	A	-	A	A	A	A	A	-	-	A	-	-	A	-	A	-	-	-	-	
Calcium Sulfate	C	A	C	B	B	D	A	A	A	A	A	A	B	-	-	A	A	D	D	A	A	D	A	A	B	
Calcium Sulfide	A	-	B	B	B	-	A	-	A	A	A	A	A	-	-	A	A	-	B	A	A	A	A	-	A	
Calcium Sulfite	B	-	B	A	-	-	A	-	A	A	A	A	-	-	-	A	B	-	A	-	A	-	A	-	A	
Calcium Thiosulfate	-	-	-	-	-	-	-	-	A	-	A	-	-	D	-	B	C	-	A	-	A	-	A	-	A	
Calgon	-	D	D	A	A	A	A	A	A	A	A	A	-	D	-	A	A	A	A	A	A	A	-	A	-	D
Cane Juice	B	A	A	A	A	A	A	A	A	-	A	A	-	-	-	A	B	A	A	D	A	B	A	-	D	
Cane Sugar Liquors	A	A	B	A	A	-	A	-	A	A	A	A	-	B	-	A	A	-	A	A	A	A	A	-	D	
Capryl Alcohol (Octanol)	A	-	A	A	-	-	A	-	C	B	B	-	A	-	-	A	B	-	D	-	A	-	A	-	D	
Caprylic Acid (Octanoic Acid)	A	-	-	A	-	-	C	-	A	-	A	D	A	-	-	C	C	-	-	-	A	A	A	-	-	

# CHEMICAL COMPATIBILITY FOR DIAPHRAGM PUMPS

CHEMICALS	METALS					PLASTICS, ELASTOMERS & LEATHER																				
	Aluminum	Carbon Steel	Cast/Ductile Iron	304 Stainless Steel	316 Stainless Steel	Acetal	Buna	CSM (Hypalon)	EPR, EPDM	Fluorocarbon	Fluoroelastomer (FKM)	Geolast (Buna & Polypropylene)	Hastelloy C	TPE	Leather	Nitrile (TS)	Nitrile (TPE)	Nylon	Polychloroprene	Polypropylene	PTFE	PVDF	Santoprene (EPDM & Polypropylene)	UHMWPE	Urethane	
A: Excellent, B: Good, C: Fair to Poor, D: Not recommended																										
- No Data																										
Caprylic Aldehyde	-	-	-	-	-	-	-	-	-	-	D	-	-	-	-	D	-	-	-	-	A	-	-	-	-	-
Carbamate	-	-	-	-	-	-	C	-	C	A	A	D	-	-	-	C	D	-	C	-	A	-	A	-	D	D
Carbitol	B	-	B	B	B	-	B	-	C	C	A	B	A	-	-	B	C	-	C	C	A	A	B	-	D	D
Carbolic Acid (Phenol)	B	D	D	B	B	D	D	D	C	A	A	D	A	D	D	D	D	D	D	C	A	B	D	B	C	C
Carbon Bisulfide	B	-	B	B	B	B	D	D	D	-	A	D	B	C	-	D	D	A	D	D	A	A	D	D	C	C
Carbon Dioxide	A	A	D	A	A	C	A	-	B	A	B	-	A	C	A	A	B	B	B	A	A	A	A	C	C	C
Carbon Dioxide (dry)	B	D	D	A	A	A	A	B	B	-	B	-	A	A	-	-	-	A	B	A	A	A	-	-	-	-
Carbon Dioxide (wet)	A	D	D	A	A	A	A	B	B	-	B	A	A	-	-	-	-	A	B	A	A	A	-	-	-	-
Carbon Disulfide	C	A	B	B	B	B	D	D	D	A	A	D	B	D	-	D	D	C	D	D	A	B	D	D	C	C
Carbon Monoxide	A	A	A	A	A	B	C	C	C	C	A	A	B	B	-	A	A	A	B	A	A	B	A	C	A	A
Carbon Tetrachloride	D	D	D	B	B	B	D	D	D	A	A	D	A	D	-	C	D	D	D	D	A	A	D	D	A	A
Carbon Tetrachloride (dry)	D	-	-	B	B	B	C	D	D	-	A	-	B	D	A	-	-	D	D	D	A	A	D	D	-	-
Carbon Tetrachloride (wet)	D	C	C	A	A	C	D	D	D	-	-	-	B	D	-	-	-	D	D	D	A	A	D	C	-	-
Carbonated Beverages	C	-	D	A	-	-	A	-	A	-	A	-	A	-	-	A	A	-	A	A	A	A	A	-	B	B
Carbonated Water	A	D	D	A	A	A	A	-	-	-	A	A	-	-	-	-	-	A	A	B	-	A	-	-	-	-
Carbonic Acid	D	D	D	B	B	B	D	C	B	A	A	B	A	D	A	A	B	B	D	B	A	A	D	B	C	C
Casein	B	-	-	B	-	-	A	-	A	A	A	A	B	-	-	A	-	-	A	-	A	-	A	-	-	-
Casing Head Gas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	-	-	A	-	A	-	-	-	-	-
Catsup (Ketchup)	D	D	D	B	B	B	A	-	A	A	A	A	A	-	-	A	A	A	D	A	A	-	A	A	D	D
Caustic	D	-	-	A	A	-	-	-	-	-	-	-	-	D	-	-	-	-	-	-	-	-	B	-	-	-
Cellosolve	B	B	B	B	B	A	D	-	C	B	D	D	A	D	-	D	D	A	D	C	A	A	C	-	D	D
Cellosolve, Acetate	B	B	B	B	B	A	C	-	B	-	D	-	A	D	-	D	D	-	D	B	A	B	A	C	D	D
Cellosolve, Butyl	B	B	B	B	B	A	-	-	B	-	D	-	-	D	-	D	D	-	D	-	A	B	C	-	D	D
Cellugard	-	-	-	-	-	-	-	-	A	-	A	-	-	-	-	A	B	-	A	-	A	-	B	-	D	D
Cellulose Acetate	B	-	B	A	-	-	B	-	-	C	-	B	A	-	-	-	-	-	B	-	A	-	-	-	-	-
Cellulube® Hydraulic Fluids	A	-	A	A	-	-	D	-	A	B	A	D	A	-	-	-	-	-	D	-	A	-	D	-	-	-
Cellutherm 2505A	-	-	-	-	-	-	-	-	D	-	A	-	-	D	-	B	C	-	D	-	A	-	D	-	D	D
Cetane (Hexadecane)	-	-	-	-	-	-	-	-	D	-	A	-	-	D	-	A	B	-	B	-	A	-	D	-	D	D
Chloracetaldehyde	-	-	-	-	-	-	-	-	A	-	D	-	-	-	-	D	-	-	D	-	A	-	-	-	D	D
Chlorate of Lime	-	-	-	-	-	-	-	-	A	-	A	-	-	D	-	C	D	-	D	-	A	-	D	A	D	D
Chlorbenzol (Conc. Pure)	-	-	-	-	-	-	-	-	D	-	D	-	-	-	-	D	D	-	D	-	A	-	D	-	-	-
Chlorextol	-	-	-	-	-	-	-	-	D	-	A	-	-	-	-	B	-	-	B	-	A	-	-	-	D	D
Chloric Acid	D	D	D	D	D	D	-	-	-	-	-	-	A	-	-	-	-	D	-	A	A	A	-	-	-	-
Chlorinated Glue	D	D	D	-	A	D	C	-	B	-	A	B	-	-	-	-	-	-	D	-	-	-	-	-	-	-

# CHEMICAL COMPATIBILITY FOR DIAPHRAGM PUMPS

CHEMICALS	METALS					PLASTICS, ELASTOMERS & LEATHER																				
	Aluminum	Carbon Steel	Cast/Ductile Iron	304 Stainless Steel	316 Stainless Steel	Acetal	Buna	CSM (Hypalon)	EPR, EPDM	Fluorocarbon	Fluoroelastomer (FKM)	Geolast (Buna & Polypropylene)	Hastelloy C	TPE	Leather	Nitrile (TS)	Nitrile (TPE)	Nylon	Polychloroprene	Polypropylene	PTFE	PVDF	Santoprene (EPDM & Polypropylene)	UHMWPE	Urethane	
A: Excellent, B: Good, C: Fair to Poor, D: Not recommended																										
- No Data																										
Chlorinated Lime - 35% Bleach	D	-	D	A	-	D	C	-	A	A	A	D	A	C	-	C	C	-	D	B	A	A	D	A	D	
Chlorinated Water	D	-	-	B	B	D	C	-	D	A	A	-	A	D	-	C	D	D	C	C	A	B	D	A	D	
Chlorine (dry)	D	D	D	D	B	D	D	D	D	A	A	-	A	D	-	D	D	D	D	D	A	A	D	B	D	
Chlorine (Wet)	D	-	D	D	D	D	D	-	D	A	A	D	A	D	D	D	D	D	D	D	D	D	D	B	D	
Chlorine Dioxide	D	-	D	D	D	-	D	-	C	B	B	D	B	D	-	D	D	-	D	D	A	A	D	-	D	
Chlorine Gas (Dry)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Chlorine Gas (Wet)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Chlorine Trifluoride	D	-	D	A	A	-	D	-	D	B	D	D	-	-	-	D	D	D	D	D	A	-	D	D	D	
Chlorine Water	D	-	-	C	C	D	D	C	C	-	A	D	A	-	-	-	-	C	D	D	A	B	-	-	-	
Chlorine, Anhydrous Liquid	D	D	D	D	D	D	D	C	D	A	A	D	D	D	-	D	D	D	D	D	A	A	D	D	D	
Chloroacetic Acid	D	D	D	D	B	D	D	-	B	C	D	D	A	D	-	D	C	D	D	C	A	B	D	D	D	
Chloroacetone	D	-	B	B	B	B	D	-	D	C	B	D	B	D	-	D	D	-	C	D	A	-	C	-	D	
Chlorobenzene	D	B	C	B	B	D	D	D	D	A	A	D	B	D	-	D	C	D	D	D	B	B	D	B	D	
Chlorobromomethane	D	B	B	B	B	B	D	D	B	A	A	D	-	D	-	D	D	C	D	D	A	-	D	D	D	
Chlorobutadiene	D	-	B	B	A	-	D	-	D	A	A	D	B	D	-	D	D	-	D	D	A	-	C	-	D	
Chlorodane	-	-	-	-	-	-	-	-	D	-	A	-	-	D	-	D	D	-	D	-	A	-	C	-	D	
Chlorododecane	D	-	D	-	-	-	D	-	D	-	A	-	-	D	-	D	D	-	D	D	A	-	D	-	D	
Chloroethanol	B	-	B	-	B	D	-	-	-	-	-	-	-	-	-	-	-	D	-	D	A	C	-	-	-	
Chloroform	D	B	D	A	A	B	D	D	D	A	A	D	B	D	-	D	C	D	D	D	A	B	D	D	D	
Chlorol 1 Nitro Ethane	D	-	-	-	-	-	D	-	D	-	D	-	-	D	-	D	D	-	D	D	A	-	C	-	D	
Chloronaphthalene	D	-	B	B	B	-	D	-	D	C	A	D	B	D	-	D	D	-	D	D	A	A	D	C	D	
Chlorophenol	C	-	C	B	B	B	-	-	D	-	B	D	A	-	-	D	C	D	D	-	A	B	C	-	D	
Chlorosulfonic Acid	D	D	D	D	D	D	D	D	D	D	D	D	B	D	-	-	-	D	D	D	A	D	A	D	-	
Chlorosulfonic Acid (Dry)	D	-	D	D	-	D	-	-	C	-	C	-	B	C	-	D	C	-	D	C	A	C	C	D	D	
Chlorosulfonic Acid (Wet)	D	-	D	D	-	D	-	-	D	-	D	-	B	D	-	D	D	-	D	C	A	C	D	D	D	
Chlorosulfonic Acid Dilute	D	-	D	D	D	B	-	-	-	-	-	-	-	D	-	-	-	-	-	C	A	-	-	C	-	
Chlorothene® (Chlorinated Solvents)	D	-	D	A	-	-	D	-	-	C	-	D	A	-	-	-	-	-	D	-	A	-	-	-	-	
Chlorotoluene	D	-	B	B	B	A	D	-	D	-	A	-	A	D	-	D	D	-	D	D	A	-	C	-	D	
Chlorotrifluoroethylene	B	-	B	B	-	-	D	-	-	-	-	-	B	-	-	-	-	-	-	-	A	-	-	-	-	
Chlorox® (Bleach)	D	D	D	A	A	D	D	B	B	A	A	D	B	-	-	-	-	A	B	D	A	A	B	-	-	
Chocolate Syrup	A	D	D	A	A	A	A	-	A	-	A	A	-	-	-	-	-	A	A	A	A	-	A	-	-	
Chrome Plating Solutions	D	-	D	-	D	-	D	-	-	-	A	-	A	-	-	-	-	-	D	B	A	A	-	-	-	
Chromic Acid	-	-	-	-	-	-	-	-	-	-	-	A	-	-	-	-	-	-	-	-	-	-	-	-	-	
Chromic Acid - 25%-50%	D	-	B	D	-	D	D	-	C	A	-	-	B	-	-	-	-	D	D	A	A	A	D	A		

# CHEMICAL COMPATIBILITY FOR DIAPHRAGM PUMPS

CHEMICALS	METALS					PLASTICS, ELASTOMERS & LEATHER																				
	Aluminum	Carbon Steel	Cast/Ductile Iron	304 Stainless Steel	316 Stainless Steel	Acetal	Buna	CSM (Hypalon)	EPR, EPDM	Fluorocarbon	Fluoroelastomer (FKM)	Geolast (Buna & Polypropylene)	Hastelloy C	TPE	Leather	Nitrile (TS)	Nitrile (TPE)	Nylon	Polychloroprene	Polypropylene	PTFE	PVDF	Santoprene (EPDM & Polypropylene)	UHMWPE	Urethane	
A: Excellent, B: Good, C: Fair to Poor, D: Not recommended  - No Data																										
Chromic Acid - 5%	C	D	D	B	A	D	D	B	A	-	A	-	B	D	-	D	D	D	D	D	A	A	A	A	D	
Chromic Acid - 50%	D	D	D	C	B	D	D	C	C	-	A	-	B	D	-	D	D	D	D	D	A	A	A	A	D	
Chromic Acid - Over 50%	D	-	B	D	-	D	D	-	C	A	-	-	B	-	-	-	-	D	D	D	A	A	D	A	-	
Chromic Acid - To 10%	B	-	B	D	-	D	D	-	A	A	-	-	B	-	-	-	-	D	D	D	A	A	D	A	-	
Chromic Acid 10%	D	D	D	B	B	D	D	C	C	-	B	-	A	D	-	-	-	D	D	D	A	A	-	-	-	
Chromic Acid 30%	D	D	D	B	B	D	D	C	B	-	A	-	D	D	-	-	-	D	D	D	A	A	-	-	-	
Chromic Acid Concentrated	D	D	C	C	C	D	-	-	-	-	-	-	-	D	-	-	-	D	-	B	A	B	D	A	-	
Chromic Acid Dilute	-	-	-	A	A	D	D	-	C	-	A	-	-	-	-	-	-	C	C	A	A	A	-	A	-	
Chromic Acid over 25%	-	-	-	-	-	-	-	-	-	-	-	D	-	-	-	-	-	-	-	-	-	-	-	-	-	
Chromium Salts	-	-	-	-	-	-	-	-	-	-	-	-	-	B	-	-	-	B	-	-	-	-	-	-	-	
Cider (Apple Juice)	B	D	D	A	A	A	A	-	A	A	A	A	A	D	-	A	B	A	A	A	A	-	A	A	D	
Citric Acid	C	D	D	B	A	B	B	C	A	A	A	A	A	A	-	-	-	D	A	B	A	A	A	A	-	
Citric Acid - 5% Solution	C	-	D	A	-	C	-	-	A	-	A	-	A	B	-	A	A	-	A	A	A	A	A	A	A	
Citric Acid Concentrated	-	-	-	-	A	C	A	-	A	-	A	-	-	B	-	-	-	D	A	A	A	A	A	A	-	
Citric Acid Dilute	A	-	-	A	A	B	-	-	-	-	-	-	-	B	-	-	-	A	-	A	A	A	A	A	-	
Citrus Pectin Liquor	-	-	-	A	-	-	A	-	-	A	C	-	-	B	-	A	B	-	A	-	A	-	-	D	C	
Cloracetic Acid	D	-	D	-	C	-	D	-	-	-	D	-	A	-	-	-	-	D	D	B	A	A	-	-	-	
Coal Gas	-	-	-	-	-	-	-	-	A	-	A	-	-	B	-	D	-	-	A	-	A	-	-	-	B	
Coal Tars	-	-	-	-	-	D	-	-	D	-	A	-	A	D	-	C	D	-	C	C	A	-	D	-	D	
Cobalt Chloride	D	-	D	-	-	-	A	-	C	A	A	A	-	-	-	A	A	-	A	A	A	-	A	-	D	
Coca Cola Syrup	-	-	-	A	A	-	-	-	A	-	B	-	-	-	-	A	B	-	B	-	A	-	A	-	B	
Coconut Oil (Coconut Butter)	B	A	A	A	A	A	B	C	D	A	A	A	A	-	-	A	B	-	D	A	A	A	B	A	C	
Cod Liver Oil	B	-	D	A	A	B	B	B	A	A	A	A	A	-	-	A	-	-	B	A	A	A	C	A	A	
Coffee	A	-	-	A	A	A	A	A	A	-	A	A	A	-	-	A	A	A	A	A	A	-	A	A	D	
Coke Oven Gas	-	-	-	-	-	-	C	-	D	A	A	-	-	-	-	C	D	-	C	-	A	A	B	A	D	
Coliche Liquors	-	-	-	-	-	-	-	-	B	-	-	-	-	-	-	B	B	-	A	-	A	-	B	-	-	
Convelex 10	-	-	-	-	-	-	-	-	-	-	A	-	-	D	-	D	D	-	D	-	A	-	D	-	D	
Coolanol (Monsanto)	D	-	D	C	-	A	-	-	D	-	A	-	B	-	-	A	B	-	B	-	-	A	D	-	D	
Copper Acetate	D	-	D	C	C	A	B	-	A	-	D	B	B	D	-	B	-	-	C	-	A	A	A	-	D	
Copper Chloride	D	-	D	D	D	A	A	C	A	A	A	A	B	A	-	-	-	D	B	A	A	A	A	A	-	
Copper Chloride - 1%	D	-	D	D	-	A	-	-	A	-	A	-	B	A	-	A	A	-	A	A	A	A	A	A	D	
Copper Cyanide	D	A	D	B	B	A	A	C	A	A	A	A	A	A	-	A	A	D	A	A	A	A	A	A	A	
Copper Fluoborate	D	D	D	D	D	B	B	-	-	-	A	B	B	A	-	B	-	-	A	-	A	-	A	-	A	
Copper Fluoride	-	-	-	D	D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	A	A	-	A		

# CHEMICAL COMPATIBILITY FOR DIAPHRAGM PUMPS

CHEMICALS	METALS					PLASTICS, ELASTOMERS & LEATHER																				
	Aluminum	Carbon Steel	Cast/Ductile Iron	304 Stainless Steel	316 Stainless Steel	Acetal	Buna	CSM (Hypalon)	EPR, EPDM	Fluorocarbon	Fluoroelastomer (FKM)	Geolast (Buna & Polypropylene)	Hastelloy C	TPE	Leather	Nitrile (TS)	Nitrile (TPE)	Nylon	Polychloroprene	Polypropylene	PTFE	PVDF	Santoprene (EPDM & Polypropylene)	UHMWPE	Urethane	
A: Excellent, B: Good, C: Fair to Poor, D: Not recommended																										
- No Data																										
Copper Fluoroborate	A	-	D	D	-	-	A	-	B	-	-	-	D	-	-	-	-	-	-	B	-	-	-	-	-	
Copper Nitrate	D	D	D	A	A	A	A	-	A	-	A	A	B	A	-	A	B	D	A	A	A	A	A	A	B	
Copper Nitrate Hexahydrate	D	-	D	A	-	A	A	-	A	A	-	A	B	-	-	-	-	D	A	A	A	A	-	-	-	
Copper Nitrite	D	-	-	A	A	A	-	-	-	-	-	-	-	-	A	-	-	D	-	A	A	A	-	-	-	
Copper Sulfate	-	-	-	A	A	A	A	-	A	-	A	A	-	B	-	-	-	C	A	A	A	A	-	A	-	
Copper Sulfate - 5% Solution	D	-	D	A	A	D	A	-	A	-	A	-	A	A	-	A	A	C	A	A	A	A	A	A	A	
Copper Sulfate (Blue Copperas)	D	-	D	A	-	A	A	-	A	A	-	-	A	-	-	-	-	B	A	A	A	A	A	A	-	
Copper Sulfate >5%	D	D	D	B	B	D	A	C	A	-	A	-	A	A	-	-	-	D	A	A	A	A	-	-	-	
Copper Sulfate 5%	D	D	D	B	B	D	A	C	A	-	A	-	A	A	-	-	-	D	A	A	A	A	-	-	-	
Copper Sulfide	-	-	-	-	-	-	A	-	-	A	-	-	-	-	-	-	-	-	-	-	A	-	-	-	-	
Corn Oil	B	A	C	B	A	A	D	B	D	A	B	A	A	A	A	A	B	A	D	A	A	A	D	A	A	
Cream	A	D	D	D	A	A	C	-	A	-	A	A	A	-	-	-	-	A	D	A	A	-	A	-	-	
Creosols	B	-	C	A	-	B	-	-	D	-	A	-	B	-	-	D	D	-	D	D	A	A	C	D	D	
Creosote Hot	B	-	B	B	B	D	A	-	D	-	A	-	-	D	-	-	-	D	B	D	A	-	-	A	-	
Creosote, Coal Tar	B	-	B	B	-	D	-	-	D	-	A	-	B	D	-	B	D	-	D	D	A	-	D	-	D	
Creosote, Coal-Tar	B	-	B	B	-	D	A	-	D	A	-	A	B	-	-	-	-	D	C	D	A	-	B	D	-	
Creosote, Wood-Tar	-	-	-	B	-	D	A	-	D	A	A	A	-	D	-	A	D	D	C	D	A	-	D	D	C	
Cresols	B	C	C	A	A	D	D	D	D	-	A	-	B	D	-	-	-	D	D	D	A	A	-	-	-	
Cresyldiphenyl Phosphate	-	-	-	-	-	D	-	-	-	-	-	-	-	-	-	-	-	A	-	-	-	-	-	-	-	
Cresylic Acid	C	A	C	A	A	D	D	D	D	A	A	D	B	D	-	D	D	D	D	D	A	B	B	D	D	
Crotonaldehyde	A	-	A	A	-	-	D	-	A	A	D	D	A	-	-	D	D	-	D	-	A	-	B	-	D	
Crude Oil	A	-	B	A	A	D	-	-	D	-	A	A	B	B	-	B	C	A	C	D	A	A	D	B	D	
Cumene (Isopropylbenzene)	B	-	B	B	-	-	D	-	D	A	A	D	B	-	-	D	D	-	D	-	A	-	D	A	D	
Cupric Acid	D	-	-	D	B	-	B	-	A	-	A	B	A	-	-	-	-	D	A	A	A	-	-	-	-	
Cupric Chloride	D	-	D	B	B	D	-	-	-	-	-	-	-	-	-	-	-	D	-	B	A	B	-	A	-	
Cutting Oil (Sulfur Base)	A	A	A	A	A	A	A	-	D	-	A	-	A	-	-	A	B	-	D	-	A	-	D	A	A	
Cutting Oil (Water Soluble)	A	A	A	A	A	A	C	-	D	A	A	-	A	-	-	C	C	-	D	-	A	-	D	A	A	
Cyanic Acid	-	D	D	A	A	D	C	-	A	-	D	D	-	-	-	C	D	-	D	-	A	-	B	-	D	
Cyclohexane	B	B	B	B	A	A	B	D	D	A	A	A	B	A	-	A	A	A	D	D	A	A	D	A	B	
Cyclohexanol	C	A	B	B	B	A	C	-	D	A	A	B	A	-	-	B	C	B	A	B	A	A	D	A	B	
Cyclohexanone	B	B	B	B	B	A	D	-	C	D	D	D	B	D	-	D	D	A	D	D	A	D	D	B	D	
Cyclopentane	B	-	B	B	-	-	B	-	D	A	-	-	B	-	-	-	-	-	A	-	A	-	-	-	-	
Cymene (Isopropyltoluene)	-	-	-	-	-	-	C	-	D	A	-	-	-	-	-	-	-	-	D	-	A	-	-	-	-	
Decahydronaphthalene (Decalin®)	-	-	-	-	-	-	D	-	D	A	-	D	-	-	-	-	-	-	D	-	A	-	-	-	-	

# CHEMICAL COMPATIBILITY FOR DIAPHRAGM PUMPS

CHEMICALS	METALS					PLASTICS, ELASTOMERS & LEATHER																				
	Aluminum	Carbon Steel	Cast/Ductile Iron	304 Stainless Steel	316 Stainless Steel	Acetal	Buna	CSM (Hypalon)	EPR, EPDM	Fluorocarbon	Fluoroelastomer (FKM)	Geolast (Buna & Polypropylene)	Hastelloy C	TPE	Leather	Nitrile (TS)	Nitrile (TPE)	Nylon	Polychloroprene	Polypropylene	PTFE	PVDF	Santoprene (EPDM & Polypropylene)	UHMWPE	Urethane	
A: Excellent, B: Good, C: Fair to Poor, D: Not recommended  - No Data																										
Decalin	-	-	-	-	-	-	D	-	D	-	A	-	-	-	-	D	D	-	D	B	A	A	C	C	D	
Decanal	-	-	-	-	-	-	D	-	D	D	D	-	-	-	-	D	-	-	D	-	A	-	D	-	-	
Decane	-	-	-	-	-	-	B	-	D	A	A	A	-	-	-	B	A	-	D	A	A	A	C	-	B	
Decyl Alcohol (Decanol)	-	-	-	-	-	-	A	-	-	B	B	-	-	-	-	B	-	-	D	-	A	-	-	-	D	
Degreasing Fluid (Chlorinated)	-	-	-	-	-	-	-	-	D	-	A	-	-	-	-	D	D	-	D	-	A	-	D	-	A	
De-Ionized Water	A	-	C	A	-	-	A	-	A	-	A	-	A	A	-	A	A	-	A	A	A	A	A	A	-	
Denatured Alcohol	B	-	B	A	A	A	A	-	A	B	B	-	A	-	-	A	A	-	B	A	A	A	B	-	D	
Detergent Solutions	B	-	A	A	A	A	A	B	A	A	A	A	B	B	-	A	B	A	B	A	A	A	B	A	A	
Detergents General	A	-	A	A	A	A	A	-	A	-	A	-	-	-	-	-	-	A	B	B	A	-	-	A	-	
Developing Fluids (Photo)	-	-	D	A	B	A	A	-	C	A	A	-	A	D	-	A	-	-	A	-	A	-	A	A	D	
Dextron	-	-	-	-	-	-	-	-	D	-	A	-	-	-	-	A	C	-	B	-	A	-	D	-	B	
Dextrose	A	-	D	A	-	-	B	-	A	A	A	B	A	B	-	A	A	-	B	A	A	A	A	A	A	
Diacetone	A	-	A	A	A	A	D	-	B	D	D	D	A	-	-	-	-	A	D	D	A	A	C	-	-	
Diacetone Alcohol	A	-	A	B	B	A	D	A	B	D	D	-	A	-	-	-	-	A	D	D	A	D	B	-	-	
Diacetone Alcohol (Acetal)	A	A	A	A	A	A	D	-	A	-	D	-	-	C	-	-	-	A	D	B	A	B	-	-	-	
Diacetone Alcohol (Diacetol)	A	-	A	A	-	A	-	-	A	-	D	-	A	C	-	D	D	-	D	B	A	A	B	-	D	
Diamylamine	-	-	-	-	-	-	-	-	A	-	D	-	-	-	-	B	-	-	D	-	A	-	B	-	D	
Diazinon	-	-	-	-	-	-	-	-	D	-	B	-	-	D	-	C	D	-	C	-	A	-	D	-	D	
Dibasic Ester	-	-	-	-	-	B	-	-	B	-	D	-	-	-	-	-	-	B	-	B	B	-	B	-	-	
Dibenzyl Ether	B	-	B	B	B	-	D	-	C	C	C	D	B	-	-	D	-	-	D	-	A	C	C	-	B	
Dibenzyl Sebecate	-	-	-	-	-	-	D	-	C	B	B	D	-	-	-	D	D	-	D	-	A	-	C	-	B	
Dibromoethyl Benzene	-	-	-	-	-	-	-	-	D	-	A	-	-	-	-	D	D	-	D	-	A	-	C	-	D	
Dibutyl Amine	-	-	A	A	-	-	C	-	D	D	B	D	A	-	-	C	D	-	D	D	A	B	C	-	D	
Dibutyl Ether	B	-	B	-	B	-	B	-	C	-	C	-	-	-	-	D	D	-	D	D	A	A	B	-	D	
Dibutyl Mercaptan	-	-	-	-	-	-	D	-	-	A	-	-	-	-	-	-	-	-	D	-	A	-	B	-	-	
Dibutyl Phthalate	A	A	A	A	A	-	D	-	B	B	C	D	A	B	A	D	B	A	D	D	A	D	B	A	C	
Dibutyl Sebecate	-	-	A	A	A	-	D	-	C	C	B	D	-	A	-	D	D	-	D	C	A	D	B	-	D	
Dichlorethane	-	-	D	A	-	A	-	-	D	-	B	-	B	D	-	D	D	-	D	A	A	A	D	C	D	
Dichloro Isopropyl Ether	D	-	-	-	-	-	D	-	D	D	C	D	-	D	-	D	D	-	D	D	A	-	D	-	B	
Dichloroacetic Acid	-	-	-	-	-	-	D	-	C	D	D	-	-	-	-	D	-	-	D	-	A	-	B	-	-	
Dichlorobenzene	B	A	A	A	B	-	D	D	D	-	C	D	A	D	-	-	-	D	D	D	A	B	D	D	-	
Dichlorobutane	D	-	B	B	-	-	D	-	D	A	A	D	-	-	-	B	-	-	D	-	A	-	-	-	D	
Dichlorodifluoro Methane	A	-	A	A	B	-	-	-	-	-	-	-	-	D	-	-	-	A	-	B	A	A	D	-	-	
Dichloroethane	B	A	A	B	B	A	D	C	-	-	C	D	A	D	-	-	-	D	D	D	A	B	D	D		

# CHEMICAL COMPATIBILITY FOR DIAPHRAGM PUMPS

CHEMICALS	METALS					PLASTICS, ELASTOMERS & LEATHER																				
	Aluminum	Carbon Steel	Cast/Ductile Iron	304 Stainless Steel	316 Stainless Steel	Acetal	Buna	CSM (Hypalon)	EPR, EPDM	Fluorocarbon	Fluoroelastomer (FKM)	Geolast (Buna & Polypropylene)	Hastelloy C	TPE	Leather	Nitrile (TS)	Nitrile (TPE)	Nylon	Polychloroprene	Polypropylene	PTFE	PVDF	Santoprene (EPDM & Polypropylene)	UHMWPE	Urethane	
A: Excellent, B: Good, C: Fair to Poor, D: Not recommended  - No Data																										
Dichloroethyl Ether	B	-	-	-	-	-	D	-	-	-	-	-	-	-	-	D	-	-	-	-	A	-	-	-	-	-
Dichloroethylene	-	-	-	-	-	-	-	-	-	-	-	-	-	D	-	-	-	A	-	A	A	A	D	D	-	-
Dichloro-Isopropyl Ether	D	-	-	-	-	-	D	-	-	-	C	-	-	-	-	-	-	-	D	D	A	-	-	-	-	-
Dichloropentane	-	-	-	-	-	-	-	-	D	-	A	-	-	-	-	D	D	-	D	-	A	-	D	-	D	-
Dicyclohexylamine	-	-	-	-	-	-	D	-	D	B	D	-	-	-	-	D	D	-	D	-	A	-	B	-	D	-
Diemethyl Formamide	A	-	A	A	-	C	-	-	B	-	D	-	A	B	-	C	C	-	D	A	A	D	A	A	D	-
Diemethyl Phthalate	A	-	A	A	-	-	-	-	B	-	A	-	A	A	-	D	D	-	D	A	A	A	A	-	-	D
Diesel Fuel	A	A	A	A	A	A	A	B	D	-	A	A	B	B	A	-	-	A	D	B	A	A	D	D	-	-
Diesel Oil (Fuel ASTM #2)	A	-	A	A	-	A	A	-	D	A	A	-	A	B	-	A	B	-	D	B	A	A	D	A	B	-
Di-Ester Lubricant Mil-L-7808	-	-	-	-	-	-	-	-	D	-	A	-	-	-	-	B	C	-	D	-	A	-	D	-	D	-
Di-Ester Synthetic Lubricants	A	-	A	A	-	-	-	-	D	-	A	-	A	D	-	D	D	-	D	-	A	-	D	-	D	-
Diester Synthetic Oils	A	-	A	A	-	-	B	-	D	A	-	-	A	-	-	-	-	-	D	-	A	-	-	-	-	-
Diethanol Amine	A	-	A	A	-	-	B	-	A	-	D	B	A	D	-	D	D	A	D	A	A	-	-	-	-	D
Diethanolamine	A	A	A	A	A	-	-	-	-	-	-	-	-	D	-	-	-	B	-	B	A	-	-	-	-	-
Diethyl Amine	B	-	D	B	-	-	C	-	C	D	D	-	A	-	-	C	D	A	C	A	A	A	C	-	C	-
Diethyl Aniline	-	-	-	-	-	-	-	-	B	-	C	-	-	-	-	D	D	-	D	A	A	A	B	-	D	-
Diethyl Benzene	-	-	-	-	-	-	D	-	D	A	A	-	-	-	-	D	D	-	D	-	A	-	C	D	D	-
Diethyl Carbonate	-	-	A	-	-	-	D	-	D	-	A	D	-	-	-	D	D	-	D	-	A	-	D	-	D	-
Diethyl Ether	B	B	B	B	B	A	D	D	D	D	D	B	B	C	-	D	D	C	D	D	A	B	B	D	A	-
Diethyl Phthalate (DEP)	A	-	A	A	-	-	D	-	-	C	C	D	A	A	-	D	B	-	-	-	A	-	A	-	-	-
Diethyl Sebecate	A	-	A	A	A	-	D	-	C	B	A	D	A	A	-	D	B	-	D	A	A	A	B	-	D	-
Diethyl Sulfate	-	-	-	-	-	-	-	-	A	-	D	-	-	-	-	D	D	-	A	-	A	-	B	-	D	-
Diethylamine	B	B	D	B	B	B	C	C	B	-	D	D	A	-	-	-	-	B	B	C	D	D	-	-	-	-
Diethylbenzen	-	-	-	-	-	-	-	-	-	-	-	D	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Diethylene Ether (Dioxane)	A	-	A	A	-	-	D	-	D	D	-	D	-	-	-	D	D	-	D	-	A	-	D	-	-	-
Diethylene Glycol	B	A	A	A	A	D	A	C	A	A	A	A	B	A	-	A	A	B	A	A	A	A	A	A	A	D
Diethylene Triamine	A	-	A	A	-	-	B	-	A	-	D	B	A	-	-	D	D	-	D	-	A	-	B	-	D	-
Difluorodibromomethane	-	-	-	-	-	-	-	-	B	-	-	-	-	D	-	D	D	-	D	-	A	-	B	-	D	-
Diisobutyl Ketone	A	-	A	A	-	-	D	-	B	D	D	D	A	-	-	D	D	-	D	-	A	-	B	-	D	-
Diisobutylene	B	-	B	B	B	A	B	-	D	C	A	B	-	D	-	B	C	A	D	A	A	A	C	A	D	-
Diisodecyl Adipate	-	-	-	-	-	-	D	-	-	C	C	D	-	-	-	D	-	-	-	-	A	-	-	-	-	-
Diisodecyl Phthalate	-	-	-	-	-	-	D	-	A	C	C	D	-	-	-	D	-	-	D	-	A	-	-	-	-	-
Diisooctyl Adipate	A	-	A	A	-	-	D	-	-	C	C	D	A	-	-	D	-	-	-	-	A	-	-	-	-	-
Diisooctyl Phthalate	-	-	-	-	-	-	D	-	B	C	C	D	-	-	-	D	D	-	-	-	A	-	C	-	-	-





# CHEMICAL COMPATIBILITY FOR DIAPHRAGM PUMPS

CHEMICALS	METALS					PLASTICS, ELASTOMERS & LEATHER																			
<b>A: Excellent,</b> <b>B: Good,</b> <b>C: Fair to Poor,</b> <b>D: Not recommended</b>  - No Data	Aluminum	Carbon Steel	Cast/Ductile Iron	304 Stainless Steel	316 Stainless Steel	Acetal	Buna	CSM (Hypalon)	EPR, EPDM	Fluorocarbon	Fluoroelastomer (FKM)	Geolast (Buna & Polypropylene)	Hastelloy C	TPE	Leather	Nitrile (TS)	Nitrile (TPE)	Nylon	Polychloroprene	Polypropylene	PTFE	PVDF	Santoprene (EPDM & Polypropylene)	UHMWPE	Urethane
	Dry Cleaning Fluid	A	A	A	A	A	-	D	-	D	A	A	-	-	-	-	C	D	-	D	D	A	A	D	D
DTE Light Oil	-	-	-	-	-	-	-	-	D	-	A	-	-	B	-	A	B	-	B	-	B	-	D	A	D
Dyes	B	-	B	A	A	C	C	-	-	-	A	-	A	-	-	-	-	A	C	-	-	-	-	-	-
Ethyl Alcohol (Ethanol)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Epichlorohydrin	D	A	A	A	A	A	D	-	C	D	D	D	A	D	-	D	D	A	D	B	A	D	B	-	D
Epsom Salts (Magnesium Sulfate)	B	A	A	A	B	B	A	A	A	A	A	A	B	-	-	A	A	B	A	A	A	A	A	A	-
Esam-6 Fluid	-	-	-	-	-	-	-	-	A	-	D	-	-	-	-	-	-	-	B	-	-	-	B	-	-
Esstic 42,43	-	-	-	-	-	-	-	-	D	-	A	-	-	D	-	A	A	-	B	-	-	-	D	-	B
Ethane	A	A	A	A	A	A	A	B	D	A	A	A	A	-	-	A	C	D	C	D	A	A	C	-	B
Ethanol (Ethyl Alcohol)	B	B	B	A	A	A	C	A	A	-	A	-	A	A	-	A	A	C	A	A	A	A	A	A	D
Ethanol Chloride	-	-	-	-	-	-	-	-	C	-	B	-	-	-	-	D	D	-	D	-	A	-	B	-	-
Ethanolamine	B	A	B	A	A	D	B	C	B	D	D	A	B	-	-	B	B	A	C	D	A	D	A	A	C
Ether	B	C	C	A	A	A	D	D	C	-	C	D	B	-	-	-	-	A	D	D	A	B	-	-	-
Ether Sulfate	-	B	-	D	D	-	-	-	-	-	-	-	-	-	-	-	-	A	-	-	A	-	-	-	-
Ethers	B	B	C	B	B	A	-	-	C	-	D	-	B	D	A	D	D	A	D	D	A	D	C	D	D
Ethylene Oxide	-	-	-	-	-	-	-	-	-	-	-	D	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylene Trichloride (Trichloroethene)	-	-	-	-	-	-	-	-	-	-	-	D	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethyl (Liquor)	-	-	-	-	-	-	-	-	-	-	-	A	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethyl Acetate	B	A	A	B	B	A	D	D	B	D	D	D	B	B	-	D	D	B	D	C	A	D	C	B	D
Ethyl Acetate 120° F	B	-	B	B	B	A	-	-	-	-	-	-	-	-	-	-	-	A	-	B	A	-	-	A	-
Ethyl Acetate 140° F	B	-	B	B	B	-	-	-	-	-	-	-	-	-	-	-	-	B	-	B	A	D	-	D	-
Ethyl Acetate 70° F	B	B	B	B	B	A	-	-	-	-	-	-	-	C	-	-	-	A	-	A	A	A	A	A	-
Ethyl Acetoacetate	A	-	A	A	-	A	D	-	C	D	D	D	A	D	-	D	D	-	D	-	A	A	C	A	D
Ethyl Acrylate	A	-	A	A	A	A	D	-	C	D	D	D	A	-	-	D	D	-	D	D	A	C	C	-	D
Ethyl Alcohol (Ethanol)	B	-	B	A	-	-	A	-	-	B	-	-	A	-	-	-	-	D	A	A	A	A	B	A	-
Ethyl Alcohol (Ethanol)	B	-	B	A	-	-	A	-	A	B	A	-	A	A	-	A	A	D	A	A	A	A	A	A	D
Ethyl Aluminum Dichloride	-	-	-	-	-	-	D	-	-	B	B	-	-	-	-	D	D	-	-	-	A	-	-	-	-
Ethyl Amine (Monoethylamine)	B	-	B	A	-	-	D	-	A	D	D	-	-	-	-	D	-	-	D	-	A	-	-	-	D
Ethyl Benzene	B	A	B	B	B	A	D	-	D	A	A	D	A	-	-	D	D	-	D	D	A	C	D	A	D
Ethyl Benzoate	A	A	A	A	A	A	D	-	D	A	A	D	A	-	-	D	D	D	D	C	A	D	C	-	D
Ethyl Bromide (Bromoethane)	A	-	A	A	-	-	D	-	D	-	A	D	-	-	-	B	C	-	D	D	A	-	D	-	D
Ethyl Butyl Acetate	-	-	-	-	-	-	D	-	-	D	D	-	-	-	-	D	D	-	-	-	A	-	-	-	-
Ethyl Butyl Alcohol	-	-	-	-	-	-	A	-	-	B	B	-	-	D	-	A	A	-	-	-	A	-	-	-	D
Ethyl Butyl Ketone	-	-	-	-	-	-	D	-	-	D	D	-	-	-	-	D	D	-	-	-	A	-	-	-	-

# CHEMICAL COMPATIBILITY FOR DIAPHRAGM PUMPS

CHEMICALS	METALS					PLASTICS, ELASTOMERS & LEATHER																				
	Aluminum	Carbon Steel	Cast/Ductile Iron	304 Stainless Steel	316 Stainless Steel	Acetal	Buna	CSM (Hypalon)	EPR, EPDM	Fluorocarbon	Fluoroelastomer (FKM)	Geolast (Buna & Polypropylene)	Hastelloy C	TPE	Leather	Nitrile (TS)	Nitrile (TPE)	Nylon	Polychloroprene	Polypropylene	PTFE	PVDF	Santoprene (EPDM & Polypropylene)	UHMWPE	Urethane	
A: Excellent, B: Good, C: Fair to Poor, D: Not recommended																										
- No Data																										
Ethyl Butyraldehyde	-	-	-	-	-	-	D	-	-	D	D	-	-	-	-	D	D	-	-	-	A	-	-	-	-	
Ethyl Butyrate	B	A	B	A	A	-	D	-	D	C	C	D	A	-	-	D	D	A	D	D	A	-	-	C	-	
Ethyl Caprylate	-	-	-	-	-	-	D	-	D	-	-	-	-	-	-	D	D	-	D	-	A	-	-	-	-	
Ethyl Cellosolve	-	-	-	-	-	-	C	-	B	D	B	-	-	-	-	-	-	-	C	-	A	-	B	-	-	
Ethyl Cellulose	B	-	A	B	B	A	B	-	B	C	D	B	B	B	-	B	B	B	B	C	A	-	A	-	B	
Ethyl Chloride	D	C	C	A	A	A	A	D	A	A	A	B	B	C	-	A	C	B	D	D	A	A	D	D	C	
Ethyl Chloride Wet	B	-	D	D	A	A	A	-	A	-	A	-	-	D	-	-	-	A	D	D	A	A	D	D	-	
Ethyl Chlorocarbonate	D	-	A	-	-	A	-	-	D	A	A	-	-	D	-	D	D	-	D	-	A	-	A	-	D	
Ethyl Chloroformate	D	-	-	-	-	A	-	-	D	-	A	-	-	D	-	D	D	-	D	D	A	-	C	-	D	
Ethyl Cyanide (Propionitrile)	-	-	-	-	-	-	D	-	A	D	D	-	-	-	-	D	D	-	B	-	A	-	-	-	-	
Ethyl Ether	C	C	C	B	B	B	D	D	D	-	D	D	B	-	-	D	D	B	D	D	A	B	D	D	D	
Ethyl Formate	C	-	A	B	B	A	D	-	C	A	C	D	B	D	-	D	D	-	B	-	A	-	B	C	-	
Ethyl Hexyl Acetate	-	-	-	-	-	-	-	-	-	-	D	-	-	D	-	D	-	-	-	-	A	-	-	-	-	
Ethyl Hexyl Alcohol (Ethylhexanol)	A	-	A	A	-	-	-	-	A	-	A	-	A	D	-	A	A	-	A	-	A	-	A	-	D	
Ethyl Iodide	-	-	-	-	-	-	-	-	C	-	B	-	-	-	-	D	-	-	D	-	A	-	-	-	-	
Ethyl Isobutyrate	-	-	-	-	-	-	D	-	D	-	-	-	-	-	-	D	-	-	D	-	A	-	-	-	-	
Ethyl Mercaptan	B	-	A	B	B	-	D	-	D	B	B	D	B	-	-	D	D	-	D	-	A	-	C	-	A	
Ethyl Oxalate	A	-	-	-	-	-	D	-	A	B	B	-	-	D	-	D	D	-	D	-	A	-	B	-	A	
Ethyl Pentachlorobenzene	D	-	-	-	-	-	D	-	D	A	A	-	-	-	-	D	D	-	D	D	A	-	D	-	C	
Ethyl Propionate	A	-	A	A	-	-	D	-	D	-	-	D	A	D	-	D	D	-	D	-	A	-	D	-	-	
Ethyl Silicate	B	-	A	A	A	-	A	-	A	A	A	A	A	B	-	A	B	-	A	-	A	-	B	C	D	
Ethyl Sulfate	-	-	-	D	D	-	A	-	A	A	D	A	-	-	-	D	D	A	A	-	A	-	B	-	D	
Ethylacrylic Acid	-	-	-	-	-	-	-	-	B	-	D	-	-	-	-	D	D	-	B	-	A	-	C	-	D	
Ethylcyclopentane	-	-	-	-	-	-	-	-	D	-	A	-	-	-	-	A	-	-	C	-	-	-	-	-	A	
Ethylene (Ethene)	A	-	A	A	A	A	B	-	D	A	A	B	-	D	-	A	B	-	C	-	A	-	C	-	B	
Ethylene Bromide	D	-	B	A	B	-	D	C	C	-	A	-	B	-	-	-	-	-	C	D	A	A	-	-	-	
Ethylene Chloride	D	-	C	B	B	A	D	D	D	-	C	D	B	C	-	D	D	B	D	D	A	A	D	C	D	
Ethylene Chlorohydrin	D	B	B	B	B	D	D	C	B	B	B	D	B	D	-	D	D	D	B	D	A	B	D	-	D	
Ethylene Diamine	D	A	A	B	B	D	B	B	A	D	D	B	C	-	-	B	B	D	B	A	A	D	A	A	D	
Ethylene Dibromide	D	-	D	B	B	-	D	-	D	B	A	D	B	-	-	D	D	-	D	D	A	A	D	-	D	
Ethylene Dichloride	D	A	B	B	B	C	D	D	D	B	B	B	B	D	A	D	C	B	D	D	A	A	D	D	D	
Ethylene Glycol	B	B	B	B	B	B	A	A	A	A	A	-	B	C	-	A	A	B	A	A	A	A	A	A	B	
Ethylene Glycol Monobutyl Ether (Butyl Cellosolve)	A	-	A	A	-	-	B	-	B	C	-	B	A	-	-	-	-	-	D	-	A	-	-	-	-	
Ethylene Glycol Monoethyl Ether Acetate	A	-	A	A	-	-	C	-	B	C	-	D	A	-	-	-	-	-	D	-	A	-	-	-	-	

# CHEMICAL COMPATIBILITY FOR DIAPHRAGM PUMPS

CHEMICALS	METALS					PLASTICS, ELASTOMERS & LEATHER																				
	Aluminum	Carbon Steel	Cast/Ductile Iron	304 Stainless Steel	316 Stainless Steel	Acetal	Buna	CSM (Hypalon)	EPR, EPDM	Fluorocarbon	Fluoroelastomer (FKM)	Geolast (Buna & Polypropylene)	Hastelloy C	TPE	Leather	Nitrile (TS)	Nitrile (TPE)	Nylon	Polychloroprene	Polypropylene	PTFE	PVDF	Santoprene (EPDM & Polypropylene)	UHMWPE	Urethane	
A: Excellent, B: Good, C: Fair to Poor, D: Not recommended  - No Data																										
Ethylene Glycol Monomethyl Ether (Methyl Cellosolve®)	B	-	B	A	-	-	C	-	B	D	-	-	A	-	-	-	-	-	C	-	A	-	-	-	-	-
Ethylene Oxide	D	D	D	C	C	D	D	D	D	C	D	-	A	A	-	D	A	A	D	D	A	B	A	C	D	D
Ethylene Trichloride	D	-	A	A	A	-	D	-	D	A	A	-	-	-	-	D	-	-	D	D	A	A	D	-	D	D
Ethylhexyl Acetate	-	-	-	-	-	-	D	-	-	D	-	-	-	-	-	-	-	-	-	-	A	-	-	-	-	-
Ethylhexyl Alcohol (Ethylhexanol)	A	-	A	A	-	-	A	-	-	B	-	-	A	-	-	-	-	-	-	-	A	-	-	-	-	-
Ethylidene Chloride	D	-	B	A	-	-	D	-	D	-	-	-	B	-	-	D	D	-	D	-	A	-	D	-	-	-
Ethyl Cellosolve	-	-	-	-	-	A	-	-	B	-	D	-	-	-	-	D	C	-	D	-	A	-	B	-	D	D
Fatty Acids	B	C	D	B	A	B	C	B	D	A	A	B	A	D	A	B	B	B	C	B	A	A	D	A	D	D
Ferric Chloride	D	D	D	D	D	D	A	B	A	A	A	A	B	C	A	A	A	D	B	B	A	A	A	D	A	A
Ferric Chloride Concentrated	D	D	D	D	D	A	A	-	A	-	A	-	-	-	A	-	-	D	A	B	A	A	-	A	-	-
Ferric Hydroxide	-	-	-	A	-	-	B	-	B	C	B	-	B	-	-	B	B	-	B	-	A	-	B	-	-	-
Ferric Nitrate	D	D	D	B	B	D	A	A	A	A	A	A	B	D	A	A	A	D	B	A	A	A	A	A	A	A
Ferric Sulfate	D	D	D	B	A	D	B	A	A	A	A	A	A	A	-	A	A	D	A	B	A	A	A	A	A	A
Ferrous Chloride	D	D	D	D	D	D	B	A	A	A	A	A	B	A	-	B	B	D	A	A	A	A	A	A	D	D
Ferrous Sulfate	D	D	D	B	B	D	B	B	A	A	B	A	B	A	-	B	A	D	A	A	A	A	A	A	A	A
Fish Oil	-	-	-	-	-	-	A	-	D	A	A	B	-	B	-	A	A	-	B	-	A	-	B	A	B	B
Fluoboric Acid	D	-	D	B	-	-	-	-	A	-	A	-	A	D	-	A	A	-	A	A	A	A	A	A	A	D
Flourine (Anhydrous)	D	-	D	A	-	A	-	-	D	-	B	-	B	D	-	D	D	-	D	D	B	A	D	-	D	D
Fluorolube (Fluoro Carbonoil)	A	-	A	A	-	-	-	-	A	-	B	-	A	D	-	A	-	-	A	D	A	-	-	-	-	-
Fluoboric Acid	D	D	D	B	B	A	B	A	A	C	B	A	A	D	-	-	-	D	B	A	A	A	A	A	-	-
Fluorinated Cyclic Ethers	D	-	-	-	-	-	-	-	A	-	A	-	-	-	-	D	D	-	D	D	A	-	D	-	-	-
Fluorine	A	D	D	C	A	D	D	-	A	-	C	D	B	-	-	-	-	D	-	D	D	A	-	-	-	-
Fluorine (Liquid)	D	-	D	A	A	-	D	-	C	B	B	-	B	-	-	-	-	D	D	D	A	A	D	A	-	-
Fluorine Gas Dry - 300° F	B	-	D	A	B	D	-	-	-	-	-	-	-	D	-	-	-	D	-	D	D	D	-	D	-	-
Fluorine Gas Wet	D	-	D	D	D	-	D	-	D	-	-	-	-	-	-	-	-	D	D	D	A	A	-	C	-	-
Fluorobenzene	D	-	-	-	-	A	D	-	D	A	A	D	-	-	-	D	D	-	D	D	A	-	C	-	-	-
Fluorocarbon Oils	D	-	A	A	-	-	C	-	A	B	-	D	A	-	-	-	D	-	A	D	A	-	D	-	-	-
Fluorochloroethylene	-	-	-	-	-	-	-	-	D	-	A	-	-	-	-	D	D	-	D	-	A	-	C	-	-	-
Fluorolube	-	-	-	-	-	-	C	-	-	-	B	-	-	-	-	-	-	-	A	-	A	-	-	-	-	-
Fluorosulfonic Acid	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fluosilicic Acid	D	D	D	C	B	A	B	A	B	A	B	A	B	B	-	A	A	D	B	A	A	B	A	A	B	B
Formaldehyde	B	C	D	D	A	B	C	C	A	A	D	B	B	C	-	C	A	D	D	C	B	A	B	A	D	D
Formaldehyde 40%	B	B	B	A	A	A	B	B	A	-	A	-	B	B	-	-	-	A	B	A	A	A	-	-	-	-
Formamide	A	-	B	B	-	-	A	-	A	D	D	-	B	D	-	A	A	-	A	-	A	-	A	-	-	-

# CHEMICAL COMPATIBILITY FOR DIAPHRAGM PUMPS

CHEMICALS	METALS					PLASTICS, ELASTOMERS & LEATHER																				
	Aluminum	Carbon Steel	Cast/Ductile Iron	304 Stainless Steel	316 Stainless Steel	Acetal	Buna	CSM (Hypalon)	EPR, EPDM	Fluorocarbon	Fluoroelastomer (FKM)	Geolast (Buna & Polypropylene)	Hastelloy C	TPE	Leather	Nitrile (TS)	Nitrile (TPE)	Nylon	Polychloroprene	Polypropylene	PTFE	PVDF	Santoprene (EPDM & Polypropylene)	UHMWPE	Urethane	
A: Excellent, B: Good, C: Fair to Poor, D: Not recommended																										
- No Data																										
Formic Acid	D	D	D	C	C	D	D	A	B	C	C	D	A	C	-	D	A	D	D	B	A	A	A	A	D	
Freon - Wet	B	-	D	C	D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Freon 11	D	A	C	A	A	A	C	-	D	B	C	-	A	A	-	A	C	D	D	D	A	B	D	-	D	
Freon 112	D	A	A	A	A	A	B	-	D	-	A	-	-	-	-	B	B	-	B	-	A	-	-	-	B	
Freon 113	D	A	A	A	A	A	B	A	D	B	C	-	A	A	-	A	D	-	C	D	A	B	D	-	B	
Freon 114	D	A	A	A	A	A	A	-	D	A	A	-	-	A	-	A	B	-	A	D	A	A	D	-	A	
Freon 114B2	D	A	A	A	A	-	B	-	D	B	B	-	-	A	-	-	-	-	A	-	A	-	D	-	D	
Freon 115	D	A	A	A	A	-	A	-	A	B	B	-	-	-	-	-	-	-	A	-	A	-	D	-	-	
Freon 12	D	A	A	B	B	B	B	A	B	B	B	-	A	A	-	A	C	B	B	B	A	B	D	-	A	
Freon 12 (Wet)	D	-	A	-	A	-	A	-	-	-	A	-	A	-	-	-	-	D	B	B	A	A	-	-	-	
Freon 13	D	A	A	A	A	A	A	-	A	A	A	-	A	C	-	A	D	-	A	D	A	A	D	-	C	
Freon 13B1	D	A	A	A	A	-	A	-	A	A	A	-	-	-	-	A	D	-	A	-	A	-	-	-	A	
Freon 14	D	A	A	A	A	-	D	-	B	-	A	-	-	-	-	A	A	-	D	-	A	-	-	-	A	
Freon 142B	D	-	-	-	-	A	D	-	A	-	D	-	-	-	-	A	-	-	A	-	A	-	-	-	-	
Freon 15	C	-	-	-	-	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Freon 152A	D	-	-	-	-	A	A	-	A	-	D	-	-	-	-	A	-	-	A	-	A	-	-	-	-	
Freon 21	D	A	A	A	A	A	D	-	D	D	D	-	-	-	-	D	D	-	D	D	A	A	D	-	-	
Freon 218	D	-	-	-	-	A	A	-	-	-	A	-	-	-	-	A	-	-	A	-	A	-	-	-	-	
Freon 21B	D	-	-	-	-	-	A	-	-	-	A	-	-	-	-	-	-	-	A	-	A	-	-	-	-	
Freon 22	D	D	D	A	A	A	D	B	C	D	D	-	A	D	-	D	D	B	B	D	A	B	D	-	D	
Freon 31	D	A	A	A	A	A	D	-	A	-	D	-	-	-	-	D	D	-	A	-	A	-	-	-	-	
Freon 32	D	A	A	A	A	A	A	-	A	-	D	-	-	-	-	A	D	-	A	-	A	-	-	-	-	
Freon 502	D	-	A	A	A	A	B	-	A	-	B	-	-	D	-	B	-	-	A	-	A	-	-	-	-	
Freon Bf	D	A	A	A	A	-	B	-	D	-	A	-	-	-	-	-	-	-	B	-	A	-	-	-	-	
Freon C316	D	-	-	-	-	A	A	-	A	-	A	-	-	-	-	A	-	-	A	-	A	-	-	-	-	
Freon C318	D	A	A	A	A	A	A	-	A	-	B	-	-	-	-	A	-	-	A	-	A	-	-	-	-	
Freon Dry	A	-	B	A	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Freon Dry F11	D	-	A	A	A	B	-	-	-	-	-	-	-	-	-	-	-	-	-	D	-	A	-	-	-	
Freon Dry F12, F113, F114	D	-	A	A	A	B	-	-	-	-	-	-	-	-	-	-	-	-	-	D	-	A	-	-	-	
Freon Dry F21, F22	D	-	A	A	A	B	-	-	-	-	-	-	-	-	-	-	-	-	-	D	-	A	-	-	-	
Freon K-142B	D	A	A	A	A	A	A	-	A	-	D	-	-	-	-	-	-	-	A	-	-	-	-	-	-	
Freon K-152A	D	-	-	-	-	A	A	-	A	-	D	-	-	-	-	-	-	-	A	-	-	-	-	-	-	
Freon K-152K	D	A	A	A	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Freon Mf	D	A	A	A	A	-	B	-	D	-	B	-	-	A	-	-	-	-	D	-	A	-	B	-	-	



# CHEMICAL COMPATIBILITY FOR DIAPHRAGM PUMPS

CHEMICALS	METALS					PLASTICS, ELASTOMERS & LEATHER																				
	Aluminum	Carbon Steel	Cast/Ductile Iron	304 Stainless Steel	316 Stainless Steel	Acetal	Buna	CSM (Hypalon)	EPR, EPDM	Fluorocarbon	Fluoroelastomer (FKM)	Geolast (Buna & Polypropylene)	Hastelloy C	TPE	Leather	Nitrile (TS)	Nitrile (TPE)	Nylon	Polychloroprene	Polypropylene	PTFE	PVDF	Santoprene (EPDM & Polypropylene)	UHMWPE	Urethane	
A: Excellent, B: Good, C: Fair to Poor, D: Not recommended  - No Data																										
Gasoline Unleaded Refined	A	-	B	A	A	B	-	-	-	-	-	-	-	A	-	-	-	A	-	C	A	D	-	C	-	
Gelatin	B	A	D	A	A	B	A	B	A	B	A	A	A	B	-	A	A	B	A	A	A	A	A	A	A	D
Glauber's Salt	-	-	-	-	-	-	A	-	B	A	A	-	-	B	-	A	-	-	A	-	A	-	-	A	A	
Gluconic Acid	B	-	C	A	-	-	C	-	-	A	-	-	-	-	-	-	-	-	-	A	A	-	-	-	-	
Glucose (Corn Syrup)	A	A	B	A	A	A	A	B	A	A	A	A	A	B	A	A	A	B	A	A	A	A	A	A	A	
Glue (PVA)	C	A	B	B	A	B	D	A	B	A	B	A	A	B	-	A	D	A	A	B	A	A	A	A	A	
Glycerin (Glycerol)	A	B	B	A	A	A	A	A	A	A	A	A	A	B	A	A	A	C	A	A	A	A	D	A	D	
Glycol	B	-	B	B	B	B	A	-	A	-	A	-	-	-	-	-	-	C	A	A	A	A	-	A	-	
Glycolic Acid	-	-	D	A	A	A	A	A	A	A	A	A	A	-	-	A	A	-	A	A	A	B	A	A	-	
Glycols	B	-	B	B	B	A	A	-	-	A	A	-	-	-	-	-	-	B	A	A	A	A	A	A	-	
Gold Monocyanide	-	D	D	D	A	A	A	-	-	A	A	A	A	-	-	-	-	-	A	-	D	A	A	-	-	
Grape Juice	B	D	D	A	A	B	C	-	A	A	A	A	-	-	-	A	A	A	D	A	A	A	A	A	D	
Grapefruit Oil	-	D	D	A	A	-	D	-	-	-	A	-	-	-	-	A	-	-	D	-	A	-	A	-	-	
Grease	A	A	A	A	A	D	A	-	D	A	A	-	A	-	-	-	-	-	D	-	A	A	B	-	-	
Grease (Ester Base)	A	A	A	A	A	A	-	-	-	-	A	-	A	-	-	C	C	A	-	A	A	A	B	-	-	
Grease (Petroleum Base)	A	A	A	A	A	A	A	-	D	-	A	A	A	A	-	A	A	A	D	A	A	A	D	-	A	
Grease (Silicone Base)	A	A	A	A	A	A	-	-	-	-	-	-	A	-	-	A	A	A	-	A	A	A	B	-	-	
Green Sulfate Liquor	B	-	C	A	-	-	B	-	A	A	A	-	B	D	-	B	B	-	B	A	A	-	A	A	A	
Halothane	-	-	-	-	-	-	-	-	-	-	A	-	-	-	-	D	D	-	D	-	-	-	-	-	D	
Halowax Oil	D	-	-	-	-	-	D	-	D	A	A	-	-	-	-	D	D	-	D	-	A	-	D	-	-	
Hannifin Lube A	-	-	-	-	-	-	-	-	D	-	A	-	-	-	-	A	A	-	A	-	-	-	D	-	A	
Heavy Water	A	-	C	A	-	-	-	-	A	-	-	-	A	B	-	A	A	-	-	-	-	-	B	-	D	
HEF - 2 (High Energy Fuel)	-	-	-	-	-	-	-	-	D	-	A	-	-	-	-	B	B	-	A	-	-	-	D	-	D	
Helium	A	-	A	A	A	A	-	-	A	-	A	-	-	-	-	A	A	A	A	A	A	A	-	A	-	A
Heptanal	A	-	A	A	-	-	A	-	-	A	-	A	A	-	-	-	-	-	-	A	-	-	-	-	-	
Heptane	A	A	A	A	A	B	A	B	D	A	A	A	A	B	A	A	B	A	C	D	A	A	C	A	B	
Hexalin	-	-	-	-	-	-	B	-	C	A	-	-	-	-	-	-	-	-	A	-	A	-	-	-	-	
Hexamine	D	A	A	A	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	-	-	-	-	
Hexanal	A	-	B	A	-	-	D	-	B	C	-	D	B	-	-	-	-	-	A	-	A	-	-	-	-	
Hexane	A	A	A	A	A	C	A	B	D	-	A	A	A	A	A	A	B	B	D	C	A	A	C	C	B	
Hexanol	A	-	A	A	-	A	-	-	A	-	A	-	A	D	-	A	A	-	B	A	A	-	C	-	D	
Hexanol Tertiary	A	A	A	A	A	A	-	-	-	-	-	-	-	-	-	-	-	A	-	B	A	-	-	-	-	
Hexyl (Hexanol)	-	-	-	-	-	-	-	-	-	-	-	A	-	-	-	-	-	-	-	-	-	-	-	-	-	
Hexyl Alcohol	A	-	-	A	-	-	A	-	-	A	-	-	A	-	-	-	-	-	B	A	A	A	B	A		

# CHEMICAL COMPATIBILITY FOR DIAPHRAGM PUMPS

CHEMICALS	METALS					PLASTICS, ELASTOMERS & LEATHER																				
	Aluminum	Carbon Steel	Cast/Ductile Iron	304 Stainless Steel	316 Stainless Steel	Acetal	Buna	CSM (Hypalon)	EPR, EPDM	Fluorocarbon	Fluoroelastomer (FKM)	Geolast (Buna & Polypropylene)	Hastelloy C	TPE	Leather	Nitrile (TS)	Nitrile (TPE)	Nylon	Polychloroprene	Polypropylene	PTFE	PVDF	Santoprene (EPDM & Polypropylene)	UHMWPE	Urethane	
A: Excellent, B: Good, C: Fair to Poor, D: Not recommended																										
- No Data																										
Hexyl Alcohol	A	-	A	A	-	-	A	-	C	A	B	-	-	D	-	B	B	-	B	-	A	A	B	C	D	
Hexylene Glycol (Brake Fluid)	A	-	A	A	-	-	A	-	C	A	A	-	A	D	-	A	-	-	A	-	A	-	-	-	-	
Hilo MS #1	-	-	-	-	-	-	-	-	A	-	D	-	-	D	-	D	D	-	D	-	-	-	-	-	B	
Honey	A	A	A	A	A	A	A	-	A	-	A	A	A	-	-	-	-	A	A	A	A	A	A	-	-	
Houghto-Safe 1010, Phosphate Ester	-	-	-	-	-	-	-	-	A	-	A	-	-	B	-	D	D	-	D	-	A	-	A	-	A	
Houghto-Safe 1055, Phosphate Ester	-	-	-	-	-	-	-	-	A	-	A	-	-	B	-	D	D	-	D	-	A	-	A	-	A	
Houghto-Safe 1120, Phosphate	-	-	-	-	-	-	-	-	A	-	A	-	-	B	-	D	D	-	D	-	A	-	A	-	A	
Houghto-Safe 271 (Water & Glycol Base)	-	-	-	-	-	-	-	-	A	-	B	-	-	B	-	A	-	-	B	-	A	-	A	-	D	
Houghto-Safe 5040 (Water/Oil Emulsion)	-	-	-	-	-	-	-	-	D	-	A	-	-	B	-	A	A	-	B	-	A	-	D	-	D	
Houghto-Safe 620 Water/Glycol	-	-	-	-	-	-	-	-	A	-	B	-	-	A	-	A	A	-	B	-	A	-	A	-	B	
Hydraulic Oil (Petro)	A	A	A	A	A	B	A	A	D	-	A	-	A	-	-	-	-	A	A	D	A	A	-	-	-	
Hydraulic Oil (Petroleum Base)	A	A	A	A	A	C	A	-	D	A	A	A	A	A	A	-	-	A	B	D	A	-	D	A	-	
Hydraulic Oil (Petroleum)	A	-	A	A	A	B	A	-	D	-	A	-	A	A	-	A	A	A	B	D	A	-	D	A	-	
Hydraulic Oil (Synthetic)	A	A	A	A	A	B	D	A	D	-	A	D	A	A	-	D	A	A	D	D	A	A	D	A	B	
Hydrazine	B	D	D	A	A	B	C	B	A	D	D	B	A	D	-	B	D	-	C	D	A	D	A	-	D	
Hydrobromic Acid	D	D	D	D	D	D	D	A	A	A	A	D	D	-	-	D	D	D	D	C	A	A	B	A	-	
Hydrobromic Acid 20%	D	D	D	D	D	C	D	A	A	-	A	-	A	-	-	-	-	D	D	A	-	A	-	-	-	
Hydrocarbons (Saturated)	-	-	-	-	-	-	A	-	D	-	A	-	-	-	-	-	-	-	B	-	-	-	-	-	-	
Hydrochloric Acid - 10%	D	D	D	D	D	D	B	-	A	A	A	-	B	D	-	-	-	D	D	A	A	A	A	A	-	
Hydrochloric Acid - 20%	D	D	D	D	D	D	C	A	A	A	A	B	D	D	-	D	D	D	D	B	A	A	A	A	B	
Hydrochloric Acid - 30%	D	-	D	D	-	D	C	-	A	B	B	-	A	D	-	-	-	D	D	B	A	A	C	C	-	
Hydrochloric Acid - 37%	D	D	D	D	D	D	B	B	C	-	A	D	B	D	-	B	D	D	D	C	A	A	B	A	D	
Hydrochloric Acid - 37% (Cold)	D	-	D	-	D	-	C	-	-	-	A	-	D	-	-	-	-	D	D	A	A	A	-	-	-	
Hydrochloric Acid - 37% (Hot)	D	-	D	-	D	-	D	-	-	-	A	-	D	-	-	-	-	D	D	-	A	A	-	-	-	
Hydrochloric Acid 100%	D	D	D	D	D	C	D	D	D	-	A	-	A	-	-	-	-	D	D	B	A	A	-	-	-	
Hydrochloric Acid, Dry Gas	D	-	-	D	D	-	-	-	-	-	-	-	A	-	-	-	-	A	-	B	A	A	-	-	-	
Hydrocyanic Acid	A	D	D	B	A	D	C	A	B	A	A	B	D	D	-	B	D	D	C	A	A	A	B	A	D	
Hydrocyanic Acid (Gas 10%)	-	-	-	-	-	C	B	-	A	-	A	-	-	-	-	-	-	-	A	A	A	-	-	-	-	
Hydrofluoric Acid	D	D	D	D	D	D	D	-	C	-	A	-	-	D	-	-	-	D	D	A	A	A	D	A	-	
Hydrofluoric Acid (20%)	D	-	D	-	D	-	D	-	-	-	A	-	D	-	-	-	-	D	C	A	A	A	-	-	-	
Hydrofluoric Acid (50%)	D	-	D	-	D	-	D	-	-	-	A	-	D	-	-	-	-	D	C	A	A	A	-	-	-	
Hydrofluoric Acid (75%)	D	-	D	-	D	-	D	-	-	-	A	-	D	-	-	-	-	D	D	C	A	A	-	-	-	
Hydrofluoric Acid (Conc-) (Hot)	D	-	D	-	D	-	D	-	-	-	B	-	D	-	-	-	-	D	D	D	A	A	-	-	-	
Hydrofluoric Acid (Conc.) (Cold)	D	-	D	D	D	D	D	-	C	B	A	-	D	-	-	-	-	D	C	D	A	A	D	A	-	



# CHEMICAL COMPATIBILITY FOR DIAPHRAGM PUMPS

CHEMICALS	METALS					PLASTICS, ELASTOMERS & LEATHER																				
	Aluminum	Carbon Steel	Cast/Ductile Iron	304 Stainless Steel	316 Stainless Steel	Acetal	Buna	CSM (Hypalon)	EPR, EPDM	Fluorocarbon	Fluoroelastomer (FKM)	Geolast (Buna & Polypropylene)	Hastelloy C	TPE	Leather	Nitrile (TS)	Nitrile (TPE)	Nylon	Polychloroprene	Polypropylene	PTFE	PVDF	Santoprene (EPDM & Polypropylene)	UHMWPE	Urethane	
A: Excellent, B: Good, C: Fair to Poor, D: Not recommended																										
- No Data																										
Hydrofluoric Acid (Hot)	D	D	D	D	B	D	D	-	D	-	C	-	-	-	-	-	-	D	D	D	A	A	-	D	-	
Hydrofluoric Acid 100%	D	D	D	D	B	D	D	B	D	-	D	D	D	D	-	D	D	D	D	D	A	A	D	-	D	
Hydrofluoric Acid 20%	D	D	D	D	D	D	D	B	D	-	A	D	D	D	-	D	D	C	D	A	A	A	D	A	D	
Hydrofluoric Acid 50%	D	D	D	D	D	D	D	B	D	-	B	D	D	D	-	D	D	D	D	B	A	A	D	A	D	
Hydrofluoric Acid 75%	D	D	D	D	D	D	D	B	D	-	D	D	D	D	-	D	D	D	D	C	A	A	D	-	D	
Hydrofluosilicic Acid 100%	D	D	D	D	D	A	B	B	B	-	A	B	B	B	-	B	D	D	B	A	A	A	B	A	D	
Hydrofluosilicic Acid 20%	D	B	D	C	D	B	B	B	A	-	A	B	B	-	-	-	-	D	B	A	A	A	-	-	-	
Hydrogen Chloride Gas	D	-	A	A	-	-	-	-	A	-	A	-	A	-	-	D	B	-	B	A	A	A	B	-	-	
Hydrogen Chloride Gas Dry	D	-	B	A	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	A	A	-	-	-	
Hydrogen Chloride Gas Wet	D	-	B	D	B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	A	A	-	-	-	
Hydrogen Cyanide	A	B	B	B	A	-	-	-	-	-	-	-	-	D	-	-	-	B	-	A	A	A	A	-	-	
Hydrogen Cyanide Gas	D	-	A	B	-	-	-	-	A	-	A	-	-	D	-	B	A	-	D	A	A	A	A	-	D	
Hydrogen Fluoride	D	-	-	D	-	-	D	-	C	A	A	-	A	D	-	D	D	D	C	A	B	A	-	-	D	
Hydrogen Fluoride Anhydrous	D	D	D	B	A	-	-	-	-	-	-	-	-	-	-	-	-	D	-	A	A	A	-	-	-	
Hydrogen Gas	A	A	A	A	A	C	A	A	B	-	A	A	A	A	-	A	A	B	A	A	A	A	A	A	A	
Hydrogen Peroxide - 10%	A	C	C	B	B	D	D	D	B	A	A	-	A	D	-	-	-	D	D	A	A	A	-	A	-	
Hydrogen Peroxide - 100%	A	B	D	B	A	D	D	D	D	-	A	D	A	D	-	B	C	D	D	B	A	A	A	A	C	
Hydrogen Peroxide - 3%	A	-	-	-	-	D	B	-	B	A	A	-	-	D	-	-	-	D	D	A	A	A	A	A	-	
Hydrogen Peroxide - 30%	A	B	D	B	B	D	D	D	B	A	A	D	A	D	-	-	-	D	D	B	A	A	-	A	-	
Hydrogen Peroxide - 5%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Hydrogen Peroxide - 50%	A	-	-	B	A	D	D	D	B	-	A	D	A	-	-	-	-	D	D	B	A	A	-	-	-	
Hydrogen Peroxide - 90%	A	-	D	A	-	D	D	-	C	A	A	-	-	D	-	-	-	D	D	A	A	A	-	A	-	
Hydrogen Sulfide (dry)	B	D	D	C	A	-	D	B	B	-	D	-	A	A	-	-	-	C	A	A	A	A	-	-	-	
Hydrogen Sulfide (wet)	D	D	D	C	A	C	D	D	B	D	D	D	A	A	-	D	D	D	C	A	A	A	A	A	D	
Hydrogen Sulfide (Wet) (Cold)	D	-	D	-	A	-	C	-	-	-	A	-	A	-	-	-	-	C	B	A	A	A	-	-	-	
Hydrogen Sulfide (Wet) (Hot)	D	-	D	-	A	-	D	-	-	-	B	-	A	-	-	-	-	D	C	A	A	A	-	-	-	
Hydrogen Sulfide Dry	B	B	D	C	A	A	-	-	A	-	D	-	A	A	A	A	D	C	A	A	A	A	A	A	A	
Hydrolube-Water/Ethylene Glycol	A	-	A	A	-	D	-	-	A	-	A	-	A	B	-	A	A	-	B	A	A	A	A	-	D	
Hydroquinone	B	-	B	B	B	A	D	D	D	C	C	D	B	-	-	D	C	D	D	A	A	A	A	A	-	
Hydroxyacetic Acid	D	-	B	B	-	C	-	-	A	-	D	A	-	-	-	D	D	-	D	-	A	-	A	-	D	
Hydroxyacetic Acid — 10%	B	-	-	B	-	-	D	-	-	-	-	-	-	-	-	-	-	-	D	-	A	-	A	-	-	
Hydroxyacetic Acid 70%	D	B	B	-	-	A	A	-	A	-	A	-	-	-	-	-	-	-	A	-	A	A	-	-	-	
Hydyne	-	-	-	-	-	-	-	-	A	-	D	-	-	-	-	B	B	-	B	-	A	-	D	-	-	
Hypochlorous Acid	D	D	D	D	D	D	D	-	B	A	A	D	A	-	-	D	D	D	D	A	A	A	A	A	D	

# CHEMICAL COMPATIBILITY FOR DIAPHRAGM PUMPS

CHEMICALS	METALS					PLASTICS, ELASTOMERS & LEATHER																				
	Aluminum	Carbon Steel	Cast/Ductile Iron	304 Stainless Steel	316 Stainless Steel	Acetal	Buna	CSM (Hypalon)	EPR, EPDM	Fluorocarbon	Fluoroelastomer (FKM)	Geolast (Buna & Polypropylene)	Hastelloy C	TPE	Leather	Nitrile (TS)	Nitrile (TPE)	Nylon	Polychloroprene	Polypropylene	PTFE	PVDF	Santoprene (EPDM & Polypropylene)	UHMWPE	Urethane	
A: Excellent, B: Good, C: Fair to Poor, D: Not recommended																										
- No Data																										
Hypoid Grease (Parapoid 10-C)	-	-	-	-	-	A	-	-	D	-	C	-	-	-	-	B	B	-	D	-	A	-	-	-	-	D
Ink (Printers)	D	D	D	C	C	B	A	-	A	-	A	-	A	A	A	A	A	C	A	-	A	A	C	A	A	A
Iodine	D	D	D	D	D	D	B	D	B	A	A	-	B	B	-	B	B	D	D	D	A	A	A	B	D	D
Iodine (in alcohol)	D	-	D	-	D	D	B	-	A	-	A	B	B	-	-	-	-	C	D	A	A	A	-	-	-	-
Iodine Pentafluoride	-	-	-	-	-	-	D	-	D	-	D	-	-	-	-	D	D	-	D	-	A	-	B	D	D	D
Iodoform	B	-	A	B	B	-	D	-	B	-	A	D	D	-	-	-	B	-	B	-	C	C	B	-	D	D
Iso Butane	-	-	-	-	-	-	-	-	D	-	A	-	-	-	-	A	-	-	D	-	A	-	-	-	-	A
Iso Butyl Acetate	A	-	A	A	-	-	-	-	C	-	D	-	A	-	-	D	D	-	D	-	A	-	-	-	-	-
Isoamyl Acetate	A	-	A	A	-	-	D	-	B	D	D	D	A	-	-	D	D	-	D	-	A	-	-	-	-	D
Isoamyl Alcohol	-	-	-	-	-	-	A	-	A	A	A	-	-	-	-	A	-	-	A	-	A	-	-	-	-	C
Isoamyl Butyrate	A	-	A	A	-	-	D	-	-	D	D	D	A	-	-	D	D	-	-	-	A	-	-	-	-	-
Isoamyl Chloride	D	-	-	-	-	-	D	-	D	A	A	-	-	-	-	D	D	-	D	-	A	-	-	-	-	-
Isobutyl	-	-	-	-	-	-	-	-	-	-	-	B	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Isobutyl Acetate	A	-	A	A	-	-	D	-	C	D	-	D	A	-	-	-	-	-	D	-	A	-	-	-	-	-
Isobutyl Alcohol	B	-	-	A	-	-	C	-	-	A	-	-	A	-	-	-	-	-	A	-	A	A	A	A	-	-
Isobutyl Alcohol	B	-	C	A	A	A	B	-	A	A	A	-	A	-	-	B	B	B	B	A	A	A	A	A	A	D
Isobutyl Amine	-	-	-	-	-	-	D	-	-	D	D	-	-	-	-	D	D	-	-	-	A	-	-	-	-	-
Isobutyl Chloride	D	-	B	B	-	-	D	-	-	B	B	D	A	-	-	D	D	-	-	-	A	-	-	-	-	-
Iso-Butyl N-Butane	-	-	-	-	-	-	-	-	-	-	B	-	-	D	-	D	D	-	-	-	A	-	-	-	-	D
Isobutyric Acid	A	-	-	-	-	-	D	-	A	-	-	D	-	-	-	D	D	-	B	-	A	-	-	-	-	-
Isocyanates	-	-	A	A	-	A	-	-	-	-	B	-	A	B	-	B	C	-	-	A	A	-	-	-	-	B
Isododecane	B	-	B	B	-	-	B	-	D	A	A	B	B	-	-	A	A	-	B	-	A	-	-	-	-	B
Isooctane	A	A	A	A	A	-	A	-	D	A	A	A	A	A	-	A	C	B	B	A	A	A	D	A	A	A
Isooctane At 120° F	-	-	-	-	-	-	A	-	D	-	A	-	-	-	-	-	-	-	B	A	A	A	-	A	-	-
Isooctane At 150° F	-	-	-	-	-	-	A	-	D	-	A	-	-	-	-	-	-	-	B	D	A	A	-	A	-	-
Isopentane	-	-	-	-	-	-	A	-	D	A	A	-	-	-	-	A	A	-	D	-	A	-	-	-	-	B
Isophorone	A	-	B	A	A	-	D	-	C	D	D	D	A	-	-	D	D	-	D	-	A	-	B	-	D	D
Isopropanol (Isopropyl Alcohol)	A	-	A	A	-	A	-	-	A	-	A	-	A	A	-	A	A	-	B	A	A	A	B	-	B	B
Isopropyl	-	-	-	-	-	-	-	-	-	-	-	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Isopropyl Acetate	D	B	B	C	B	D	D	D	B	D	D	D	B	C	-	D	D	B	D	B	A	D	B	C	D	D
Isopropyl Acetate At 120° F	-	-	-	-	-	-	D	-	B	-	D	-	-	-	-	-	-	A	D	C	A	-	-	-	-	-
Isopropyl Acetate At 150° F	-	-	-	-	-	-	D	-	B	-	D	-	-	-	-	-	-	A	D	-	A	-	-	-	-	-
Isopropyl Alchol	B	-	C	A	-	-	C	-	-	A	-	-	A	-	-	-	-	-	B	A	A	A	B	A	-	-
Isopropyl Alcohol	A	A	A	A	A	A	B	-	B	A	A	-	A	A	A	A	A	D	B	A	A	A	B	A	D	D

# CHEMICAL COMPATIBILITY FOR DIAPHRAGM PUMPS

CHEMICALS	METALS					PLASTICS, ELASTOMERS & LEATHER																				
	Aluminum	Carbon Steel	Cast/Ductile Iron	304 Stainless Steel	316 Stainless Steel	Acetal	Buna	CSM (Hypalon)	EPR, EPDM	Fluorocarbon	Fluoroelastomer (FKM)	Geolast (Buna & Polypropylene)	Hastelloy C	TPE	Leather	Nitrile (TS)	Nitrile (TPE)	Nylon	Polychloroprene	Polypropylene	PTFE	PVDF	Santoprene (EPDM & Polypropylene)	UHMWPE	Urethane	
A: Excellent, B: Good, C: Fair to Poor, D: Not recommended  - No Data																										
Isopropyl Amine	-	-	A	A	-	-	D	-	-	D	D	D	-	-	-	D	D	-	-	-	A	-	-	-	-	-
Isopropyl Benzene (Cumene)	-	-	-	-	-	-	-	-	D	-	A	-	-	-	-	D	D	-	D	-	A	-	-	D	D	-
Isopropyl Chloride	D	-	A	A	A	A	D	-	D	B	B	D	A	-	-	D	D	-	D	D	A	-	C	-	D	-
Isopropyl Ether	B	A	A	A	A	D	C	C	D	C	D	B	A	-	-	B	B	A	D	D	A	D	C	A	B	-
Isopropyl Ether 120° F - 150° F	-	-	-	-	-	-	B	-	D	-	D	-	-	-	-	-	-	-	C	D	A	-	-	A	-	-
Isopropyl Ether To 70° F	-	-	-	-	-	-	B	-	D	-	D	-	-	-	-	-	-	A	C	A	A	-	-	A	-	-
Isotane	D	-	-	-	-	-	A	-	-	-	A	A	-	-	-	-	-	D	D	D	-	A	-	-	-	-
Jet Fuel (JP1 to JP6)	A	A	A	A	A	A	A	D	D	A	A	A	A	-	-	-	-	C	D	D	A	B	D	-	-	-
Jet Fuel 120° F - 150° F	-	-	-	-	-	A	-	-	-	-	-	-	-	-	-	-	-	A	-	D	A	A	-	-	-	-
Jet Fuel To 70° F	-	-	-	-	-	A	-	-	-	-	-	-	-	-	-	-	-	A	-	A	A	A	D	-	-	-
Jp-1	A	A	A	A	A	A	A	-	D	-	A	-	A	-	-	A	C	-	D	D	A	A	D	A	C	-
Jp-2	A	A	A	A	A	A	A	-	D	-	A	-	A	-	-	A	C	-	D	D	A	A	C	A	C	-
Jp-3	A	A	A	A	A	A	A	-	D	-	A	-	A	-	-	A	C	-	D	A	A	A	C	A	C	-
Jp-4	A	A	A	A	A	A	A	-	D	-	A	-	A	A	-	A	A	-	D	A	A	A	D	A	C	-
Jp-5	A	A	A	A	A	A	A	-	D	-	A	-	A	-	-	A	C	-	D	A	A	A	C	A	B	-
Jp-6	A	A	A	A	A	A	A	-	D	-	A	-	A	-	-	A	C	-	D	D	A	A	C	A	C	-
Jp-X	A	A	A	A	A	A	A	-	D	-	D	-	A	-	-	A	A	-	B	D	A	A	C	A	-	-
Kel F Liquids	-	-	-	-	-	-	-	-	A	-	B	-	-	-	-	A	-	-	-	-	A	-	-	-	-	-
Kerosene	A	A	A	A	A	A	A	D	D	A	A	A	B	C	A	A	A	A	D	D	A	A	D	C	B	-
Kerosene 120°F - 150°F	-	-	-	-	-	A	A	-	D	-	A	-	-	-	A	-	-	A	B	D	A	A	-	-	-	-
Kerosene To 70° F	-	-	-	-	-	A	A	-	D	-	A	-	-	B	A	-	-	A	B	A	A	A	D	-	-	-
Ketchup	-	-	-	A	A	A	A	-	A	-	A	-	-	-	A	-	-	A	A	-	A	-	-	-	-	-
Ketones	B	A	A	A	A	D	D	-	A	-	D	D	A	D	A	D	D	A	D	D	A	D	D	C	D	-
Keystone #87HX-Grease	-	-	-	-	-	-	-	-	D	-	A	-	-	-	-	A	-	-	D	-	A	-	-	A	A	-
Lacquer Solvents	A	B	B	A	A	B	D	-	D	D	D	-	A	D	B	D	A	B	D	C	A	D	C	A	D	-
Lacquer Thinners	A	C	C	A	A	D	D	D	D	-	D	D	A	D	-	-	-	A	D	D	A	-	-	-	-	-
Lacquers	A	C	C	A	A	D	D	D	D	D	D	D	A	D	-	D	D	A	D	D	A	D	C	A	D	-
Lactam-Amino Acids	-	-	-	-	-	-	-	-	B	-	D	-	-	-	-	D	-	-	B	-	A	-	-	-	-	-
Lactic Acid	D	D	D	B	B	C	B	A	A	A	A	B	B	D	A	-	-	D	C	B	A	C	A	A	-	-
Lactic Acid - 5% Solution	C	-	D	A	-	A	-	-	A	-	A	-	B	D	-	A	B	-	A	A	A	A	A	A	B	-
Lactol	A	-	A	A	-	A	C	-	-	A	A	-	A	-	-	A	-	-	D	D	A	-	-	-	-	-
Lard	A	A	A	B	A	B	A	B	D	A	A	A	A	B	A	-	-	A	D	B	A	A	B	A	-	-
Lard Oil (Cold)	A	A	A	A	A	A	A	-	D	-	A	-	-	-	A	-	-	-	B	-	A	-	-	-	-	-
Lard Oil (Hot)	A	A	A	A	A	A	A	-	D	-	A	-	A	B	A	A	-	-	B	B	A	A	B	A	C	-

# CHEMICAL COMPATIBILITY FOR DIAPHRAGM PUMPS

CHEMICALS	METALS					PLASTICS, ELASTOMERS & LEATHER																				
	Aluminum	Carbon Steel	Cast/Ductile Iron	304 Stainless Steel	316 Stainless Steel	Acetal	Buna	CSM (Hypalon)	EPR, EPDM	Fluorocarbon	Fluoroelastomer (FKM)	Geolast (Buna & Polypropylene)	Hastelloy C	TPE	Leather	Nitrile (TS)	Nitrile (TPE)	Nylon	Polychloroprene	Polypropylene	PTFE	PVDF	Santoprene (EPDM & Polypropylene)	UHMWPE	Urethane	
A: Excellent, B: Good, C: Fair to Poor, D: Not recommended  - No Data																										
Latex	A	-	-	A	A	C	A	-	A	-	A	A	A	-	-	A	A	A	B	A	A	A	A	-	D	
Lauryl Alcohol (N-Dodecanol)	A	A	A	A	A	-	A	-	-	B	B	-	A	-	-	A	-	-	-	-	A	-	A	A	D	
Lavender Oil	-	-	-	-	-	-	B	-	D	B	B	B	-	-	-	B	B	-	D	-	A	-	B	-	-	
Lead Acetate	D	D	D	B	B	B	B	D	A	D	D	B	B	-	A	B	B	B	B	A	A	A	A	A	D	
Lead Chloride	D	-	-	B	-	-	-	-	A	-	A	-	B	-	-	A	-	-	B	A	A	A	-	-	-	
Lead Molten	B	-	-	B	B	D	-	-	-	-	-	-	-	-	-	-	-	D	-	D	D	D	-	D	-	
Lead Nitrate	D	-	B	B	B	-	B	-	A	A	A	B	B	-	-	A	A	-	A	A	A	A	-	A	-	
Lead Sulfamate	C	-	C	C	C	A	B	A	B	-	A	B	-	-	-	B	A	B	A	A	B	A	A	-	-	
Lehigh X1169	-	-	-	-	-	-	-	-	D	-	A	-	-	-	-	A	-	-	B	-	A	-	-	-	A	
Lehigh X1170	-	-	-	-	-	-	-	-	D	-	A	-	-	-	-	A	-	-	B	-	A	-	-	-	A	
Lemon Oil	C	-	A	A	A	D	C	-	D	-	A	-	A	-	-	A	-	-	D	D	A	A	C	-	-	
Light Grease	-	-	-	-	-	A	-	-	D	-	A	-	-	-	-	A	-	-	D	-	A	-	-	-	A	
Lignin Liquor	-	-	-	A	-	-	A	-	D	A	A	-	-	-	-	A	-	-	A	-	A	-	-	-	D	
Ligroin	D	-	A	A	A	B	A	C	D	A	A	A	-	-	-	A	B	D	B	D	A	A	B	-	C	
Lime	D	A	A	A	A	D	A	-	D	-	A	-	-	B	-	A	A	B	B	B	A	A	A	-	B	
Lime Bleach	D	-	-	A	A	-	A	-	A	A	A	-	-	-	-	A	B	-	C	B	A	-	A	-	-	
Lime Slurries	B	-	-	B	-	-	B	-	C	B	D	-	-	-	-	A	A	-	A	-	A	-	A	-	B	
Lime Sulfur	D	-	C	A	A	-	D	-	A	A	A	-	-	-	-	A	A	B	A	A	A	B	B	A	A	
Lime, Soda (Slaked Lime & Soda Ash)	-	-	-	-	-	-	B	-	A	B	-	B	-	-	-	-	-	-	B	-	A	-	A	-	-	
Limonene	-	-	-	-	-	-	C	-	D	A	A	-	-	-	-	D	D	-	D	-	A	-	-	-	-	
Lindol, Hydraulic Fluid	-	-	-	-	-	-	D	-	A	B	B	-	-	-	-	D	D	-	D	-	A	-	A	-	D	
Lineoleic Acid	A	D	D	B	A	-	B	-	D	-	B	-	-	-	-	-	-	-	D	B	A	A	-	-	-	
Linoleic Acid	A	-	D	B	A	B	B	D	D	B	B	B	A	-	-	B	B	-	D	B	A	A	B	A	-	
Liquid Oxygen	-	-	-	-	-	-	-	-	D	-	D	-	-	-	-	D	D	-	D	-	A	-	-	-	D	
Liquid Petroleum Gas (LPG)	-	-	-	-	-	A	A	-	D	-	A	-	A	B	-	A	D	B	C	D	A	A	C	-	C	
Liquimoly	-	-	-	-	-	-	-	-	D	-	A	-	-	-	-	A	A	-	B	-	A	-	-	-	B	
Lithium Bromide	-	-	A	-	-	-	A	-	A	A	A	-	-	-	-	A	A	-	D	-	A	A	-	-	D	
Lithium Chloride	D	A	B	A	A	A	A	-	A	-	A	A	A	-	-	A	A	-	A	A	A	A	-	D	D	
Lithium Hydroxide	D	-	B	B	B	D	C	-	A	-	C	D	B	-	-	D	D	-	D	A	A	-	-	D	D	
Lubricants	A	A	A	A	A	A	A	A	D	-	A	-	A	A	-	-	-	A	D	B	A	A	-	-	-	
Lubricants (Petroleum)	C	-	A	A	A	A	A	-	D	A	B	A	A	A	-	A	B	A	B	D	A	A	D	B	B	
Lubricating Oil	A	A	A	A	A	A	A	-	D	-	A	-	-	A	A	-	-	A	B	A	A	A	-	A	-	
Lubricating Oil Di-Ester	A	A	A	A	A	-	B	-	D	-	A	-	-	D	-	B	A	-	D	-	A	-	D	A	D	
Lubricating Oil SAE 10, 20, 30, 40, 50	A	-	A	A	-	A	-	-	D	-	A	-	A	A	-	A	A	-	D	C	A	A	D	A	A	

# CHEMICAL COMPATIBILITY FOR DIAPHRAGM PUMPS

CHEMICALS	METALS					NON-METAL, ELASTOMERS & LEATHER																				
	Aluminum	Carbon Steel	Cast/Ductile Iron	304 Stainless Steel	316 Stainless Steel	Acetal	Buna	CSM (Hypalon)	EPR, EPDM	Fluorocarbon	Fluoroelastomer (FKM)	Geolast (Buna & Polypropylene)	Hastelloy C	TPE	Leather	Nitrile (TS)	Nitrile (TPE)	Nylon	Polychloroprene	Polypropylene	PTFE	PVDF	Santoprene (EPDM & Polypropylene)	UHMWPE	Urethane	
A: Excellent, B: Good, C: Fair to Poor, D: Not recommended  - No Data																										
Lye (Calcium Hydroxide)	C	A	A	B	B	D	A	A	A	-	B	-	A	B	-	-	-	A	A	A	A	A	A	-	-	-
Lye (Potassium Hydroxide)	D	B	B	B	A	D	C	A	A	B	B	D	B	D	-	-	-	C	B	A	A	A	A	A	A	-
Lye (Sodium Hydroxide)	D	D	D	B	B	D	B	A	B	-	B	-	C	C	-	-	-	C	B	A	A	D	A	A	A	-
Lye 10%	D	-	C	B	A	A	-	-	-	-	-	-	-	-	-	-	-	A	-	-	A	-	-	-	-	-
Lye 50%	D	-	C	B	B	C	-	-	-	-	-	-	-	-	-	-	-	D	-	-	A	A	-	A	-	-
Lye Concentrated	D	-	C	B	D	D	B	-	A	-	B	-	-	-	-	-	-	D	B	A	A	-	-	-	-	-
Lye Solutions	-	-	-	A	A	D	C	-	A	-	B	-	-	C	-	D	B	A	B	A	A	A	A	A	A	B
Lysol	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	B	B	-	B	-	A	-	-	-	-	-
M Cresol	-	-	-	-	-	D	D	-	D	-	A	-	-	-	-	-	-	D	C	D	A	B	-	A	-	-
Maganese Chloride	-	-	D	-	-	-	-	-	C	-	A	-	B	-	-	A	A	-	B	A	A	-	-	A	B	-
Magnesium Bisulfate	D	-	-	A	B	-	B	-	-	-	-	B	-	-	-	-	-	A	B	A	A	-	-	-	-	-
Magnesium Bisulfite	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	B	C	-	B	-	A	-	-	-	-	-
Magnesium Carbonate	D	B	B	B	B	A	A	A	C	A	A	A	B	-	-	A	A	A	A	A	A	A	A	A	A	B
Magnesium Chloride	D	D	D	D	D	B	A	A	A	A	A	A	A	C	A	A	A	A	A	A	A	A	A	A	A	-
Magnesium Hydroxide (Milk of Magnesia)	D	A	B	B	A	A	B	A	A	A	A	B	A	C	A	A	A	B	B	A	A	A	A	A	A	A
Magnesium Nitrate	D	D	D	B	B	A	A	A	A	A	A	A	B	-	-	A	A	A	A	A	A	A	A	A	A	B
Magnesium Oxide	B	A	A	A	A	A	A	-	A	B	C	A	A	-	-	A	A	-	A	-	A	-	A	-	-	-
Magnesium Salts	-	-	-	-	-	-	-	-	A	-	A	-	-	-	-	A	A	-	A	-	A	-	A	-	A	A
Magnesium Sulfate	D	B	C	A	B	B	A	A	A	A	A	-	B	B	A	A	B	A	A	B	A	A	A	B	D	-
Magnesium Sulfite	-	-	-	-	-	-	-	-	A	-	A	-	-	-	-	A	B	-	A	-	A	-	A	-	-	-
Malathion	-	-	-	-	-	-	-	-	D	-	A	-	-	D	-	B	-	-	-	-	A	-	-	-	D	-
Maleic Acid	B	A	D	B	B	A	D	D	D	A	A	D	B	-	A	C	A	D	D	B	A	A	A	A	D	-
Maleic Anhydride	A	-	B	A	A	D	D	D	D	A	A	D	A	-	-	D	D	-	D	D	A	A	A	-	-	-
Malic Acid	B	-	D	A	A	A	B	D	D	A	A	B	B	-	A	A	B	D	D	B	A	A	A	-	-	-
Malt Beverages	A	D	D	A	A	A	A	-	A	-	A	-	-	-	-	A	B	-	A	-	A	-	A	A	B	-
Manganese Chloride	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	-	A	A	-	-	A	-	-
Manganese Sulfate	B	A	B	B	B	A	A	-	A	-	A	A	A	-	-	-	-	A	A	B	A	A	-	-	-	-
Maple Sugar Liquors (Sucrose)	-	-	-	A	-	-	A	-	A	A	A	A	-	-	-	A	A	-	A	-	A	-	A	-	D	-
Mash	A	-	-	A	A	A	A	-	A	-	A	A	-	-	-	A	A	A	A	-	-	-	A	-	A	A
Mayonnaise	D	D	D	C	A	A	C	-	D	-	A	A	A	-	A	A	A	A	D	A	A	A	A	A	D	-
MCS 312	-	-	-	-	-	-	-	-	D	-	A	-	-	-	-	D	D	-	D	-	A	-	-	-	-	-
MCS 352	-	-	-	-	-	-	-	-	A	-	D	-	-	-	-	D	D	-	D	-	A	-	-	-	D	-
MCS 463	-	-	-	-	-	-	-	-	A	-	D	-	-	-	-	D	D	-	D	-	A	-	-	-	D	-
Melamine	-	D	D	-	D	A	C	-	A	-	A	D	-	-	-	-	-	A	D	A	A	-	-	-	-	-

# CHEMICAL COMPATIBILITY FOR DIAPHRAGM PUMPS

CHEMICALS	METALS					PLASTICS, ELASTOMERS & LEATHER																				
	Aluminum	Carbon Steel	Cast/Ductile Iron	304 Stainless Steel	316 Stainless Steel	Acetal	Buna	CSM (Hypalon)	EPR, EPDM	Fluorocarbon	Fluoroelastomer (FKM)	Geolast (Buna & Polypropylene)	Hastelloy C	TPE	Leather	Nitrile (TS)	Nitrile (TPE)	Nylon	Polychloroprene	Polypropylene	PTFE	PVDF	Santoprene (EPDM & Polypropylene)	UHMWPE	Urethane	
A: Excellent, B: Good, C: Fair to Poor, D: Not recommended																										
- No Data																										
Melamine Resins	-	-	-	D	-	A	-	-	A	-	A	-	A	-	-	C	C	-	D	-	A	-	B	-	D	
Mercaptan	-	-	-	-	-	-	-	-	A	-	D	-	-	-	-	D	D	-	D	-	A	-	-	-	D	
Mercuric Chloride	D	D	D	D	D	B	A	-	A	A	A	A	B	B	-	A	A	D	B	A	A	A	A	A	A	
Mercuric Chloride (Dilute Solution)	D	D	D	D	D	B	A	A	A	-	A	-	C	B	-	-	-	D	A	B	A	A	-	-	-	
Mercuric Cyanide	D	D	D	C	C	-	B	-	A	A	A	A	B	D	-	A	A	A	B	B	B	A	A	A	-	
Mercurous Nitrate	D	-	B	B	B	-	B	-	A	A	A	B	B	-	-	B	B	-	B	A	A	A	-	A	-	
Mercury	D	A	B	A	A	C	A	A	A	A	A	A	A	B	A	A	A	A	A	B	A	A	A	A	A	
Mesityl Oxide	A	-	A	A	A	-	D	-	B	D	D	D	A	-	-	D	D	-	D	-	A	-	C	-	D	
Methane	A	-	D	A	A	A	A	B	D	A	B	A	A	B	-	A	B	A	B	B	A	A	D	-	C	
Methanol	B	A	A	A	A	A	A	A	A	-	D	-	A	B	-	A	A	B	A	A	A	A	A	A	D	
Methyl	-	-	-	-	-	-	-	-	-	-	-	A	-	-	-	-	-	-	-	-	-	-	-	-	-	
Methyl Acetate	B	B	B	A	B	B	D	D	C	D	D	D	A	C	-	D	D	A	D	D	A	B	B	-	D	
Methyl Acetoacetate	-	-	A	A	-	-	D	-	B	D	D	-	A	-	-	D	D	-	D	-	A	-	-	-	D	
Methyl Acetone	A	A	A	A	A	D	D	-	A	-	D	D	A	-	-	C	D	A	D	D	A	D	B	-	-	
Methyl Acrylate	-	A	A	A	-	B	D	D	C	D	D	D	-	-	-	D	D	-	D	D	A	B	D	-	D	
Methyl Acrylic Acid	-	-	-	-	-	A	-	-	C	D	C	-	-	-	-	D	-	-	C	-	A	-	A	-	D	
Methyl Alcohol (Methanol)	B	-	A	A	-	-	A	-	D	D	-	-	A	-	-	-	-	-	A	A	A	A	A	A	-	
Methyl Alcohol	B	A	A	B	A	A	A	-	A	B	D	-	A	A	A	A	A	D	C	A	A	A	A	A	D	
Methyl Alcohol 10%	A	A	A	A	A	A	A	A	A	-	C	-	A	B	-	-	-	B	A	A	A	A	-	-	-	
Methyl Amine	B	A	B	A	A	A	B	-	A	A	C	B	B	-	-	B	B	-	C	D	A	C	-	-	-	
Methyl Amyl Acetate	A	-	A	A	-	-	A	-	-	D	-	A	A	-	-	-	-	-	-	-	A	-	-	-	-	
Methyl Amyl Alcohol	A	-	A	A	-	-	A	-	-	D	D	-	A	-	-	A	B	-	D	-	A	-	-	-	-	
Methyl Aniline	-	-	-	-	-	-	A	-	D	-	B	-	-	-	-	D	D	-	B	-	A	-	-	-	D	
Methyl Benzoate	-	-	-	-	-	-	-	-	D	-	A	-	-	-	-	D	D	-	A	-	A	-	-	-	D	
Methyl Bromide	D	A	A	A	A	D	C	D	D	A	A	B	B	D	-	B	B	D	D	D	A	A	D	C	D	
Methyl Butyl Ketone	A	-	-	A	A	D	D	D	B	D	D	D	-	-	-	D	D	D	D	D	A	D	C	-	D	
Methyl Butyrate	A	-	A	A	-	-	D	-	D	-	-	D	A	-	-	D	D	-	D	-	A	-	-	-	-	
Methyl Carbonate	-	-	-	-	-	-	-	-	D	-	A	-	-	-	-	D	D	-	D	-	A	-	-	-	D	
Methyl Cellosolve	B	C	C	B	B	D	D	D	B	D	D	D	-	-	-	C	C	C	D	B	A	A	B	-	D	
Methyl Cellulose	-	-	-	-	-	-	-	-	B	-	D	-	-	-	-	B	B	-	B	-	A	-	-	-	B	
Methyl Chloride	D	D	D	A	A	B	D	D	D	B	B	D	B	D	-	D	D	C	D	D	A	A	D	C	D	
Methyl Chloride (Dry)	D	D	D	A	A	B	D	-	C	-	B	-	-	D	-	-	-	D	D	D	A	A	D	-	-	
Methyl Chloride (Wet)	D	D	D	A	A	B	D	-	C	-	B	-	-	-	-	-	-	D	D	D	A	A	-	-	-	
Methyl Chloroformate	-	-	-	-	-	-	-	-	D	-	A	-	-	-	-	D	D	-	D	-	A	-	-	-	D	

# CHEMICAL COMPATIBILITY FOR DIAPHRAGM PUMPS

CHEMICALS	METALS					PLASTICS, ELASTOMERS & LEATHER																				
	Aluminum	Carbon Steel	Cast/Ductile Iron	304 Stainless Steel	316 Stainless Steel	Acetal	Buna	CSM (Hypalon)	EPR, EPDM	Fluorocarbon	Fluoroelastomer (FKM)	Geolast (Buna & Polypropylene)	Hastelloy C	TPE	Leather	Nitrile (TS)	Nitrile (TPE)	Nylon	Polychloroprene	Polypropylene	PTFE	PVDF	Santoprene (EPDM & Polypropylene)	UHMWPE	Urethane	
A: Excellent, B: Good, C: Fair to Poor, D: Not recommended  - No Data																										
Methyl Cyanide	-	-	-	-	-	-	-	-	A	-	D	-	-	-	-	C	C	-	A	-	A	-	-	-	-	-
Methyl Cyclopentane	-	-	-	A	-	A	B	-	D	A	A	-	-	-	-	D	D	-	D	-	A	-	C	A	D	
Methyl D-Bromide	-	-	-	-	-	-	-	-	-	-	A	-	-	-	-	D	D	-	D	-	A	-	-	-	D	
Methyl Dichloride	D	-	-	-	-	D	D	-	D	A	A	D	-	-	-	D	D	C	D	D	A	D	D	-	-	
Methyl Ether	-	-	-	-	-	-	-	-	A	-	A	-	-	-	-	A	-	-	C	-	A	-	-	-	-	
Methyl Ethyl Ketone (MEK)	B	A	A	A	A	C	D	D	A	D	D	D	A	B	-	D	B	C	D	D	A	D	D	D	D	
Methyl Ethyl Ketone Peroxide	-	-	-	-	-	-	D	D	D	-	D	-	-	-	-	-	-	-	D	-	-	-	-	-	-	
Methyl Formate	A	-	B	B	B	A	D	-	C	D	D	D	-	-	-	D	D	-	B	-	A	-	B	-	D	
Methyl Hexane	-	-	-	-	-	-	A	-	D	A	A	-	-	-	-	A	-	-	B	-	A	-	-	-	-	
Methyl Iodide	D	-	A	A	-	-	D	-	A	-	-	D	A	-	-	D	D	-	D	-	A	-	-	-	-	
Methyl Isobutyl Ketone (MIBK)	B	C	C	B	B	A	D	D	C	D	D	D	A	B	-	-	-	D	D	D	A	D	C	-	-	
Methyl Isopropyl Ketone	A	C	C	A	A	A	D	D	C	D	D	D	-	-	-	D	D	D	D	C	A	A	C	C	D	
Methyl Methacrylate	B	C	C	B	B	D	D	D	D	C	D	D	-	-	-	D	D	-	D	D	A	B	B	-	D	
Methyl Oleate	-	-	-	-	-	A	D	-	C	D	B	-	-	-	-	D	D	-	D	-	A	-	C	-	-	
Methyl Propyl Salicylate	A	-	A	-	-	A	-	-	B	-	B	-	-	-	-	D	D	-	D	B	A	B	B	-	-	
Methyl Salicylate (Betula Oil)	A	-	A	-	-	-	D	-	C	B	B	D	-	-	-	-	-	-	D	B	A	B	B	-	-	
Methylacrylic Acid	-	-	-	-	-	-	-	-	-	B	B	-	-	-	-	-	-	-	B	-	A	-	A	-	-	
Methylamine	B	A	B	A	A	D	B	-	A	A	D	-	B	-	-	B	-	-	A	A	A	C	A	-	-	
Methylene Bromide	D	-	A	A	-	-	D	-	D	B	C	D	A	-	-	D	D	-	D	-	A	A	-	-	-	
Methylene Chloride	D	B	B	B	B	D	D	-	D	B	B	D	B	D	-	D	C	D	D	D	A	D	D	D	D	
Methylene Dichloride	-	-	-	-	-	-	-	-	D	-	B	-	-	-	-	D	D	-	D	-	A	-	-	-	D	
Milk	A	D	D	A	A	A	B	A	A	A	A	A	A	B	A	A	A	A	A	B	A	A	A	A	D	
Mine Water	B	-	A	B	-	A	A	-	A	-	A	-	A	-	-	A	A	-	C	A	A	A	B	A	D	
Mineral Oil	A	A	A	A	A	A	A	B	D	A	A	A	A	A	A	A	A	A	B	C	A	A	D	C	A	
Mineral Spirits	A	B	B	A	A	A	A	C	D	-	A	A	B	-	-	-	-	A	C	B	A	-	-	-	-	
Mixed Acids	D	D	D	D	D	-	D	-	B	A	-	-	B	-	-	-	-	D	D	D	A	A	-	-	-	
MLO-7277 Hydr.	-	-	-	-	-	-	-	-	D	-	A	-	-	-	-	C	-	-	D	-	A	-	-	-	D	
MLO-75557	-	-	-	-	-	-	-	-	D	-	A	-	-	-	-	C	-	-	D	-	A	-	-	-	D	
MLO-8200 Hydr.	-	-	-	-	-	-	-	-	D	-	A	-	-	-	-	B	-	-	A	-	A	-	-	-	A	
MLO-8515	-	-	-	-	-	-	-	-	D	-	A	-	-	-	-	B	-	-	B	-	A	-	-	-	D	
Molasses	A	B	B	A	A	B	A	-	A	A	A	A	A	B	A	A	A	A	A	B	A	B	A	A	B	
Monobromobenzene	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Monochloroacetic acid	D	D	D	D	B	D	D	A	C	-	C	-	B	D	-	D	D	D	A	A	D	B	D	D	D	
Monochlorobenzene	D	-	A	B	B	A	D	-	D	A	A	-	-	C	-	D	D	C	D	D	A	B	D	B	D	

# CHEMICAL COMPATIBILITY FOR DIAPHRAGM PUMPS

CHEMICALS	METALS					PLASTICS, ELASTOMERS & LEATHER																				
	Aluminum	Carbon Steel	Cast/Ductile Iron	304 Stainless Steel	316 Stainless Steel	Acetal	Buna	CSM (Hypalon)	EPR, EPDM	Fluorocarbon	Fluoroelastomer (FKM)	Geolast (Buna & Polypropylene)	Hastelloy C	TPE	Leather	Nitrile (TS)	Nitrile (TPE)	Nylon	Polychloroprene	Polypropylene	PTFE	PVDF	Santoprene (EPDM & Polypropylene)	UHMWPE	Urethane	
A: Excellent, B: Good, C: Fair to Poor, D: Not recommended  - No Data																										
Monochlorodifluoro Methane	D	-	D	A	A	-	-	-	A	-	D	-	-	D	-	D	D	D	A	A	A	B	D	-	D	
Monoethanolamine	B	B	B	A	B	D	D	D	B	C	D	B	-	D	-	B	D	A	D	D	A	D	A	-	D	
Monomethyl Aniline	-	-	-	-	-	-	D	-	D	-	C	-	-	D	-	D	D	-	D	C	A	-	B	A	D	
Monomethyl Hydrazine	-	-	-	-	-	-	-	-	A	-	-	-	-	D	-	B	B	-	B	-	A	-	-	A	-	
Monomethylether	-	-	-	-	-	-	A	-	A	-	A	-	-	D	-	A	A	-	B	-	A	-	C	-	-	
Mononitrololuene & Dicitrotoluene (40/60 Mixture)	-	-	-	-	-	-	-	-	D	-	C	-	-	D	-	D	A	-	D	-	A	-	-	-	D	
Monovinyl Acetylene	-	-	-	-	-	-	A	-	-	-	A	-	-	-	-	-	-	-	B	-	A	-	-	-	-	
Morpholine	A	-	A	-	A	-	D	-	D	-	-	D	A	-	-	-	-	A	D	B	A	D	-	-	-	
Motor oil	A	A	A	A	A	B	A	-	D	-	-	-	-	B	-	-	-	A	B	C	A	B	-	-	-	
Motor oil (Petroleum Base)	-	-	-	-	-	-	-	-	-	-	-	A	-	-	-	-	-	-	-	-	-	-	-	-	-	
Muriatic Acid	D	D	D	D	D	D	D	-	C	-	B	-	-	D	-	-	-	D	D	B	A	A	A	A	-	
Muriatic Acid (10%-20% HCL)	D	-	D	D	-	D	-	-	A	-	A	-	A	D	-	D	B	-	D	A	A	A	A	A	B	
Mustard	B	D	D	D	D	C	C	-	A	D	D	B	A	B	-	B	B	A	C	A	A	A	A	A	B	
N,N-Dimethyl Formamide (DMF)	A	-	-	A	-	B	C	-	-	D	-	-	A	-	-	-	-	A	D	A	A	A	A	-	-	
N,N-Dimethylaniline	B	-	B	-	-	-	D	-	C	D	-	-	-	-	-	-	-	A	D	D	A	A	B	-	-	
n-Amyl Amine	-	-	-	-	-	-	C	-	D	D	-	-	-	-	-	-	-	-	D	-	A	-	-	-	-	
Napalm	-	-	-	-	-	-	-	-	D	-	A	-	-	D	-	B	B	-	-	-	-	-	-	-	B	
Naphtha	A	B	B	A	A	A	B	D	D	A	A	A	B	B	A	A	A	A	D	D	B	A	D	C	C	
Naphtha Coal Tar (Benzol)	A	-	B	A	-	-	D	-	D	A	-	-	A	-	-	-	-	-	D	-	A	-	-	-	-	
Naphthalene	B	A	B	A	B	A	D	D	D	A	A	D	A	C	-	D	D	A	D	B	A	A	D	B	B	
Naphthoic Acid	B	-	B	A	-	-	B	-	D	A	-	B	B	-	-	-	-	-	-	-	A	-	-	-	-	
Naptha-Coal Tar (Benzol)	A	-	A	A	-	A	-	-	D	-	A	-	A	D	-	D	D	-	D	C	A	A	C	A	B	
Napthenic Acid	B	-	B	A	A	A	B	-	D	-	A	-	B	D	-	B	B	-	D	-	A	-	B	-	-	
Natural Gas	A	A	A	A	A	B	A	-	D	-	A	A	-	B	-	A	A	-	A	A	A	-	C	-	C	
n-Butyl Acetate	A	-	A	A	-	-	D	-	D	D	-	D	A	-	-	-	-	-	D	-	A	-	A	-	-	
Neatsfoot Oil	A	-	A	A	A	B	A	-	C	A	A	B	-	D	-	A	A	-	D	-	A	-	B	-	A	
Neohexane	-	-	-	-	-	-	A	-	-	A	A	-	-	D	-	A	A	-	-	-	A	-	-	-	-	
Neosol	B	-	B	A	-	-	A	-	B	C	C	-	A	D	-	A	A	-	A	-	A	-	-	-	-	
Neville Acid	-	-	-	-	-	-	C	-	C	B	A	-	-	D	-	D	D	-	D	-	A	-	A	-	-	
N-Hexaldehyde	A	-	A	A	A	-	D	-	A	-	D	-	-	D	-	D	D	-	A	-	A	-	C	A	B	
n-Hexane	A	-	A	A	-	C	A	-	D	A	-	-	A	-	-	-	-	A	B	C	A	A	A	B	-	
n-Hexane 1 (Hexylene)	-	-	-	-	-	-	A	-	D	A	-	-	-	-	-	-	-	-	B	-	A	-	C	-	-	
N-Hexene-1	-	-	-	-	-	-	A	-	-	-	A	-	-	-	-	-	-	-	B	-	A	-	-	-	-	
Nickel Acetate	D	-	-	A	-	-	B	-	A	D	D	B	-	-	-	B	B	-	B	A	A	A	A	-	D	



# CHEMICAL COMPATIBILITY FOR DIAPHRAGM PUMPS

CHEMICALS	METALS					PLASTICS, ELASTOMERS & LEATHER																				
	Aluminum	Carbon Steel	Cast/Ductile Iron	304 Stainless Steel	316 Stainless Steel	Acetal	Buna	CSM (Hypalon)	EPR, EPDM	Fluorocarbon	Fluoroelastomer (FKM)	Geolast (Buna & Polypropylene)	Hastelloy C	TPE	Leather	Nitrile (TS)	Nitrile (TPE)	Nylon	Polychloroprene	Polypropylene	PTFE	PVDF	Santoprene (EPDM & Polypropylene)	UHMWPE	Urethane	
A: Excellent, B: Good, C: Fair to Poor, D: Not recommended  - No Data																										
Nickel Ammonium Sulfate	-	-	-	-	-	-	-	-	-	-	A	-	-	-	-	-	C	-	A	-	A	-	A	-	-	-
Nickel Chloride	D	D	D	D	C	B	A	A	A	A	A	A	B	D	A	A	A	D	B	A	A	A	A	A	A	A
Nickel Nitrate	D	C	C	B	B	D	A	D	A	A	A	A	B	-	-	A	A	A	A	A	A	A	A	A	A	A
Nickel Salts	-	-	-	-	-	-	-	-	A	-	A	-	-	-	-	A	A	-	B	-	A	-	A	-	-	A
Nickel Sulfate	D	D	D	B	B	B	A	A	A	A	A	A	B	D	A	A	A	B	A	A	A	A	A	A	A	A
Nicotine	-	-	-	-	-	-	-	-	-	-	A	-	-	B	-	-	A	-	C	-	A	-	-	-	-	A
Nicotinic Acid	-	-	-	-	-	-	-	-	A	-	-	-	-	-	-	A	A	-	A	-	A	-	-	-	-	-
Niter Cake	-	-	-	-	-	-	A	-	A	-	A	-	-	-	-	A	A	-	A	-	A	-	A	A	A	A
Nitrana (Ammonia Fertilizer)	-	-	-	A	-	-	B	-	-	C	C	-	-	-	-	B	B	-	B	-	A	-	-	-	-	-
Nitrating Acid (<15% HNO3)	D	C	C	C	D	-	-	-	-	-	-	-	A	-	-	-	-	-	A	C	A	-	-	-	-	-
Nitrating Acid (>15% H2SO4)	D	C	C	C	C	D	D	-	A	-	-	-	A	-	-	-	-	-	A	C	A	-	-	-	-	-
Nitrating Acid (S1% Acid)	D	-	-	C	A	-	-	-	-	-	-	-	A	-	-	-	-	-	A	C	A	-	-	-	-	-
Nitrating Acid (S15% H2SO4)	D	A	A	C	C	-	-	-	-	-	-	-	A	-	-	-	-	-	A	C	A	-	-	-	-	-
Nitric Acid - 10%	D	D	D	A	A	D	D	-	B	A	A	D	A	D	-	-	-	D	B	D	A	A	D	D	-	-
Nitric Acid - 20%	D	D	D	A	A	D	D	D	B	-	A	D	B	D	-	D	B	D	D	B	A	A	B	A	C	-
Nitric Acid - 25%	D	D	D	A	A	D	D	-	B	A	A	-	A	D	-	-	-	D	C	D	A	A	D	D	-	-
Nitric Acid - 30%	-	-	-	-	-	-	-	-	-	-	-	D	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitric Acid - 35%	D	D	D	A	A	D	D	-	C	A	A	-	A	D	-	-	-	D	D	D	A	A	D	D	-	-
Nitric Acid - 50%	D	D	D	B	A	D	D	D	D	A	A	D	D	D	-	D	C	D	D	D	A	A	D	D	C	-
Nitric Acid - 65%	D	-	D	A	-	D	-	-	D	-	A	-	D	D	-	D	D	-	D	D	A	A	C	D	C	-
Nitric Acid - 70%	A	-	D	A	A	D	D	-	D	A	B	D	D	D	-	-	-	D	D	D	A	A	D	D	-	-
Nitric Acid (5-10% Solution)	D	D	D	A	A	D	D	B	B	-	A	-	A	C	-	D	A	D	D	A	A	A	A	A	C	-
Nitric Acid (Conc.)	D	D	D	A	A	D	D	D	D	B	B	D	B	D	-	D	D	D	D	D	A	A	D	D	D	-
Nitric Acid (Red Fuming)	D	D	D	B	B	D	D	-	D	B	B	D	B	D	-	D	-	D	D	D	A	D	D	D	D	-
Nitric Acid Dilute	A	D	D	A	A	D	D	-	B	-	A	-	-	-	-	-	-	-	B	-	A	A	-	A	-	-
Nitro Ethane	A	-	A	-	A	-	D	-	-	-	C	-	-	-	-	-	-	-	C	C	A	-	-	-	-	-
Nitrobenzene	C	C	C	B	B	C	D	D	D	B	B	D	D	D	-	D	D	C	D	D	A	B	B	D	D	-
Nitrobenzine	-	-	-	-	-	-	-	-	-	-	A	-	-	-	-	-	-	-	D	-	A	A	-	-	-	-
Nitroethane	A	-	A	A	-	B	D	-	C	D	D	D	A	-	-	D	D	-	C	C	A	A	A	A	D	-
Nitrogen	A	-	A	A	A	A	A	-	A	-	A	-	A	B	-	A	A	A	A	A	A	A	A	-	A	-
Nitrogen Fertilizer	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	-	-	-	-	-
Nitrogen Tetroxide	D	-	D	A	-	-	D	-	D	C	D	D	A	B	-	D	D	-	D	D	A	C	D	A	D	-
Nitroglycerine	-	-	-	-	-	-	-	-	A	-	A	-	-	D	-	A	-	-	A	-	A	-	A	-	A	-
Nitromethane	B	A	B	A	A	A	D	-	C	D	D	D	A	D	-	D	D	B	D	C	A	B	A	A	D	-

# CHEMICAL COMPATIBILITY FOR DIAPHRAGM PUMPS

CHEMICALS	METALS					PLASTICS, ELASTOMERS & LEATHER																				
	Aluminum	Carbon Steel	Cast/Ductile Iron	304 Stainless Steel	316 Stainless Steel	Acetal	Buna	CSM (Hypalon)	EPR, EPDM	Fluorocarbon	Fluoroelastomer (FKM)	Geolast (Buna & Polypropylene)	Hastelloy C	TPE	Leather	Nitrile (TS)	Nitrile (TPE)	Nylon	Polychloroprene	Polypropylene	PTFE	PVDF	Santoprene (EPDM & Polypropylene)	UHMWPE	Urethane	
A: Excellent, B: Good, C: Fair to Poor, D: Not recommended  - No Data																										
Nitropropane	A	-	A	A	-	-	D	-	B	D	D	D	A	-	-	D	-	-	D	-	A	-	B	A	D	
Nitrous Acid	D	D	D	B	B	-	-	-	B	-	B	-	D	-	-	D	D	D	D	D	A	B	-	-	-	
Nitrous Oxide	B	B	B	D	B	-	-	-	A	-	B	-	B	-	-	A	A	C	B	D	A	D	-	-	B	
N-Methyl Aniline	-	-	-	-	-	-	D	-	-	C	-	-	-	-	-	-	-	-	D	C	A	-	-	-	-	
N-Octane	-	-	-	-	-	-	B	-	D	A	A	A	-	-	-	B	D	A	D	D	A	A	B	-	D	
n-Propyl Acetate	A	-	-	A	-	-	D	-	A	D	-	D	A	-	-	-	-	-	D	C	A	A	B	-	-	
n-Propyl Nitrate (NPN)	A	-	D	-	-	-	A	-	B	C	-	A	-	-	-	-	-	-	-	-	A	-	B	-	-	
o-Chlorophenol	B	-	B	B	-	B	D	-	D	B	-	-	B	-	-	-	-	D	D	-	A	A	-	-	-	
Octachlorotoluene	D	-	-	-	-	-	D	-	D	A	A	-	-	-	-	D	D	-	D	D	A	-	-	-	D	
Octadecane	-	-	-	-	-	-	A	-	D	A	A	-	-	-	-	A	-	-	B	-	A	-	B	-	A	
Octane	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Octyl Acetate	A	-	-	A	-	-	D	-	-	D	D	B	-	-	-	D	D	-	-	-	A	-	-	-	-	
Octyl Alcohol	A	-	-	A	-	-	B	-	B	A	B	-	A	-	-	B	B	-	B	-	A	-	B	-	D	
O-Dichlorobenzene	D	-	B	B	B	-	D	-	D	A	A	D	A	-	-	-	-	-	D	D	A	A	D	-	-	
Oils: Aniline	D	A	A	A	A	D	D	D	B	-	C	D	B	D	-	D	D	A	D	A	A	A	C	-	D	
Oils: Anise	-	A	A	-	A	D	-	-	-	-	-	-	-	-	-	-	-	-	D	-	A	-	-	-	-	
Oils: Bay	-	A	A	-	A	D	-	-	-	-	A	-	-	-	-	-	-	-	D	-	-	A	-	-	-	
Oils: Bone	-	A	A	-	A	D	A	-	-	-	A	A	-	-	-	-	-	-	D	A	A	A	-	-	-	
Oils: Castor	A	B	B	A	A	A	B	A	B	A	A	A	A	D	A	A	B	A	A	A	A	A	D	A	A	
Oils: Cinnamon	-	-	D	A	A	D	-	-	-	-	A	-	-	-	-	-	-	-	D	D	A	-	C	D	-	
Oils: Citric	C	D	D	A	A	B	C	-	B	A	A	D	-	-	-	A	B	-	D	A	A	-	C	-	-	
Oils: Clove	B	-	D	A	A	-	A	-	-	-	A	A	A	-	-	C	-	-	C	B	A	-	C	A	-	
Oils: Coconut	B	A	A	A	A	A	B	C	D	A	A	A	A	-	-	A	B	-	D	A	A	A	B	A	C	
Oils: Cod Liver	B	-	D	A	A	B	B	B	A	A	A	A	A	-	-	A	-	-	B	A	A	A	C	A	A	
Oils: Corn	B	A	C	B	A	A	D	B	D	A	B	A	A	A	A	A	B	A	D	A	A	A	D	A	A	
Oils: Cottonseed	B	A	C	C	A	B	C	B	D	A	A	B	A	A	-	A	B	B	D	A	A	B	B	B	A	
Oils: Creosote	B	-	-	B	B	D	D	D	D	-	A	A	B	D	-	-	-	D	C	D	A	-	-	-	-	
Oils: Crude	A	-	B	A	A	D	-	-	D	-	A	A	B	B	-	B	C	A	C	D	A	A	D	B	D	
Oils: Diesel Fuel (20,30,40,50)	A	A	A	A	A	D	A	B	D	-	A	B	B	A	-	-	-	A	D	B	A	A	-	-	-	
Oils: Fish	-	-	-	-	-	-	A	-	D	A	A	B	-	B	-	A	A	-	B	-	A	-	B	A	B	
Oils: Fuel (1,2,3,5A,5B,6)	C	A	A	A	A	D	B	D	D	-	B	D	A	A	-	-	-	A	D	B	A	B	-	-	-	
Oils: Ginger	-	-	D	D	D	A	A	-	A	A	A	A	-	-	-	-	-	-	A	-	A	A	C	-	-	
Oils: Hydraulic Oil (Petro)	A	A	A	A	A	B	A	A	D	-	A	-	A	-	-	-	-	A	A	D	A	A	-	-	-	
Oils: Hydraulic Oil (Synthetic)	A	-	-	A	A	-	D	A	A	-	A	-	A	-	-	-	-	A	A	D	A	A	-	-	-	

# CHEMICAL COMPATIBILITY FOR DIAPHRAGM PUMPS

CHEMICALS	METALS					PLASTICS, ELASTOMERS & LEATHER																				
	Aluminum	Carbon Steel	Cast/Ductile Iron	304 Stainless Steel	316 Stainless Steel	Acetal	Buna	CSM (Hypalon)	EPR, EPDM	Fluorocarbon	Fluoroelastomer (FKM)	Geolast (Buna & Polypropylene)	Hastelloy C	TPE	Leather	Nitrile (TS)	Nitrile (TPE)	Nylon	Polychloroprene	Polypropylene	PTFE	PVDF	Santoprene (EPDM & Polypropylene)	UHMWPE	Urethane	
A: Excellent, B: Good, C: Fair to Poor, D: Not recommended																										
- No Data																										
Oils: Lavender	-	-	-	-	-	-	B	-	D	B	B	B	-	-	-	B	B	-	D	-	A	-	B	-	-	
Oils: Lemon	C	-	A	A	A	D	C	-	D	-	A	-	A	-	-	A	-	-	D	D	A	A	C	-	-	
Oils: Linseed	B	A	A	A	A	A	A	C	D	A	A	A	B	B	A	A	A	A	D	A	A	A	B	A	B	
Oils: Mineral	A	A	A	A	A	A	A	B	D	A	A	A	A	A	A	A	A	A	B	C	A	A	D	C	A	
Oils: Neatsfoot	A	-	A	A	A	B	A	-	C	A	A	B	-	D	-	A	A	-	D	-	A	-	B	-	A	
Oils: Olive	A	A	A	B	A	A	D	B	D	A	A	A	A	-	-	A	D	A	D	A	A	B	B	A	A	
Oils: Orange	A	-	-	A	A	D	A	-	-	-	A	A	A	-	-	-	-	-	D	A	-	A	-	-	-	
Oils: Palm	B	A	B	A	A	A	B	-	D	B	A	A	A	-	-	A	-	C	D	A	A	A	B	A	A	
Oils: Peanut	A	A	A	A	A	A	A	B	D	A	A	A	A	-	-	A	A	-	D	D	A	A	B	A	B	
Oils: Peppermint	D	-	-	A	A	D	D	-	-	A	A	D	-	-	-	D	-	-	D	B	A	A	C	C	-	
Oils: Pine	A	C	C	A	A	A	D	D	D	A	A	B	-	D	A	B	B	A	D	D	A	B	C	C	D	
Oils: Rapeseed	-	A	A	A	A	A	D	D	A	A	A	A	A	-	-	B	-	-	D	D	A	A	B	D	B	
Oils: Rosin	B	-	-	A	A	-	A	-	-	-	A	A	A	-	-	-	-	A	-	A	A	A	-	-	-	
Oils: Sesame Seed	A	A	A	A	A	D	A	-	-	A	A	A	-	-	-	A	A	-	D	A	A	A	B	-	-	
Oils: Silicone	B	A	B	A	A	A	A	A	A	A	A	A	A	B	-	A	A	A	D	A	A	A	C	A	A	
Oils: Soybean	B	A	A	A	A	B	A	C	D	A	A	A	A	B	-	A	A	B	D	B	A	B	C	A	B	
Oils: Sperm (whale)	-	A	A	A	A	D	A	-	D	A	A	A	A	-	-	A	-	-	D	A	A	A	B	-	-	
Oils: Tall (Liquid Rosin)	-	-	-	-	-	-	-	-	-	-	-	A	-	-	-	-	-	-	-	-	-	-	-	-	-	
Oils: Tanning	-	-	-	A	A	D	A	-	-	-	A	A	-	-	-	-	-	-	D	-	-	A	-	-	-	
Oils: Transformer	A	-	B	A	A	C	B	-	D	A	A	B	A	-	-	A	B	A	C	D	A	A	D	A	A	
Oils: Tung (Wood Oil)	A	A	B	A	B	A	A	-	D	-	B	A	A	B	-	A	D	-	B	A	A	A	B	A	C	
Oils: Turbine	A	A	A	A	A	A	B	D	D	-	A	B	-	-	-	B	-	A	D	B	A	A	-	-	A	
Oils: Vegetable	B	B	B	A	A	A	B	-	D	A	A	B	A	-	A	A	A	A	D	D	A	A	B	D	A	
Oils: Waste	-	-	-	-	-	B	-	-	D	-	-	-	-	-	-	-	-	-	-	-	A	-	-	D	-	
Oleic Acid	B	B	C	A	A	C	C	C	D	-	B	B	A	A	A	-	-	B	D	B	A	A	-	A	-	
Oleic Acid (Red Oil)	A	-	C	B	-	B	C	-	C	B	A	-	A	A	-	A	D	B	D	B	A	A	B	A	B	
Olein (Triolein)	-	-	-	-	-	-	B	-	-	-	-	-	-	-	-	B	-	-	C	-	A	-	D	-	-	
Oleum 100% (Fuming Sulfuric)	D	-	D	A	A	D	D	D	D	A	B	D	D	D	-	D	D	D	D	D	A	D	D	D	D	
Oleum 25%	B	-	-	B	B	D	D	D	D	-	A	-	A	C	-	-	-	D	D	D	A	C	-	-	-	
Oleum Spirits	D	-	D	B	B	-	C	-	D	-	A	-	-	B	-	B	D	-	D	D	A	D	D	A	C	
Olive Oil	A	A	A	B	A	A	D	B	D	A	A	A	A	-	-	A	D	A	D	A	A	B	B	A	A	
Oronite 8200	-	-	-	-	-	-	-	-	D	-	A	-	-	B	-	B	-	-	A	-	A	-	-	-	A	
Oronite 9515	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	B	-	-	-	-	A	-	-	-	-	
Orthochloro Ethyl Benzene	-	-	-	-	-	-	-	-	D	-	A	-	-	-	-	D	-	-	D	-	A	-	-	-	D	

# CHEMICAL COMPATIBILITY FOR DIAPHRAGM PUMPS

CHEMICALS	METALS					PLASTICS, ELASTOMERS & LEATHER																				
	Aluminum	Carbon Steel	Cast/Ductile Iron	304 Stainless Steel	316 Stainless Steel	Acetal	Buna	CSM (Hypalon)	EPR, EPDM	Fluorocarbon	Fluoroelastomer (FKM)	Geolast (Buna & Polypropylene)	Hastelloy C	TPE	Leather	Nitrile (TS)	Nitrile (TPE)	Nylon	Polychloroprene	Polypropylene	PTFE	PVDF	Santoprene (EPDM & Polypropylene)	UHMWPE	Urethane	
A: Excellent, B: Good, C: Fair to Poor, D: Not recommended  - No Data																										
Ortho-Dichlorobenzene	-	-	-	-	-	-	-	-	D	-	A	-	-	D	-	D	-	-	D	-	A	-	D	-	D	
OS 45 Type 111 (OS45)	-	-	-	-	-	-	-	-	D	-	B	-	-	C	-	B	-	-	A	-	A	-	-	-	D	
OS 45 Type IV (OS45-1)	-	-	-	-	-	-	-	-	D	-	B	-	-	-	-	B	-	-	A	-	A	-	-	-	D	
OS 70	-	-	-	-	-	-	-	-	D	-	A	-	-	-	-	B	-	-	A	-	A	-	-	-	D	
Oxalic Acid - 5% (Hot and Cold)	B	-	D	B	-	D	-	-	A	-	A	-	B	D	-	B	C	-	B	A	A	A	A	A	A	
Oxalic Acid (cold)	D	D	D	D	D	D	D	B	A	C	A	D	B	D	A	-	-	B	D	A	A	B	A	A	-	
Oxygen	A	B	B	A	A	A	C	-	A	-	A	-	-	B	A	-	-	B	A	C	A	A	A	A	-	
Oxygen - 200°-400°F	A	-	A	-	A	-	D	-	-	-	B	-	-	-	-	-	-	D	D	D	A	A	-	-	-	
Ozone	B	D	C	B	B	D	D	A	A	A	A	D	A	C	-	D	-	D	C	D	A	A	A	B	A	
P Dioxane	-	-	-	-	-	A	D	-	B	-	B	-	-	-	-	-	-	A	D	B	A	D	-	A	-	
Paint Thinner, Duco	D	B	B	B	A	A	D	-	D	B	B	-	A	-	A	D	D	A	D	D	A	-	C	-	D	
Paints & Solvents	D	-	-	A	A	-	D	-	-	-	-	-	A	-	-	-	-	-	D	-	A	-	-	-	-	
Palm Oil	B	A	B	A	A	A	B	-	D	B	A	A	A	-	-	A	-	C	D	A	A	A	B	A	A	
Palmitic Acid	C	-	C	B	A	A	A	D	B	-	A	A	B	A	A	A	A	C	D	B	A	A	B	-	A	
Para-Dichlorobenzene	-	-	-	-	-	-	-	-	D	-	A	-	-	-	-	D	-	-	D	-	A	-	-	-	D	
Paraffin	A	A	A	A	A	A	B	-	D	-	B	A	B	-	A	A	A	A	B	A	A	A	A	A	A	
Paraformaldehyde	A	-	A	A	-	-	B	-	A	C	C	B	A	-	-	B	-	-	B	-	A	-	-	-	-	
Paraaldehyde	A	-	A	A	-	-	C	-	A	D	D	-	A	-	-	D	-	-	D	-	A	-	-	-	-	
P-Cymene	-	-	-	-	-	-	-	-	D	-	A	-	-	-	-	D	D	-	D	-	A	-	B	A	D	
P-Dichlorobenzene	D	-	B	B	-	B	-	-	D	-	A	-	A	D	-	D	D	-	D	B	A	A	D	-	D	
Peanut Oil	A	A	A	A	A	A	A	B	D	A	A	A	A	-	-	A	A	-	D	D	A	A	B	A	B	
Pentachloroethane (Pentalin)	D	-	A	A	-	A	D	-	-	A	A	D	A	-	-	D	D	-	D	D	A	A	-	-	-	
Pentachlorophenol (PCP)	A	-	A	A	-	-	D	-	D	A	A	D	A	-	-	D	-	-	D	-	A	-	-	-	D	
Pentane	B	-	C	C	C	B	A	B	D	A	A	A	B	B	-	A	-	A	B	D	A	A	A	A	D	
Peppermint Oil	D	-	-	A	A	D	D	-	-	A	A	D	-	-	-	D	-	-	D	B	A	A	C	C	-	
Perchloric Acid	D	D	D	D	D	C	D	-	B	A	A	D	B	D	-	D	D	D	B	D	D	A	D	C	D	
Perchloric Acid-10%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Perchloric Acid-70%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Perchloroethylene	D	A	B	B	A	B	D	D	D	A	B	D	B	D	-	D	D	D	D	D	A	A	D	B	D	
Permachlor (Degreasing Fluid)	-	-	-	-	-	-	-	-	D	-	C	-	-	-	-	D	-	-	-	-	A	-	-	-	-	
Petrolatum	B	-	-	A	A	B	A	-	D	-	A	A	A	-	-	A	A	D	B	D	C	A	-	-	D	
Petroleum	D	-	C	A	A	B	A	D	D	-	A	-	-	B	-	-	-	A	B	B	A	A	C	C	-	
Petroleum - Above 250	A	-	A	-	A	-	C	-	-	-	B	-	-	-	-	-	-	D	D	-	A	-	-	-	-	
Petroleum - Below 250	A	-	A	-	A	-	A	-	-	-	A	-	-	-	-	-	-	A	B	A	A	A	-	-	-	

# CHEMICAL COMPATIBILITY FOR DIAPHRAGM PUMPS

CHEMICALS	METALS					PLASTICS, ELASTOMERS & LEATHER																				
	Aluminum	Carbon Steel	Cast/Ductile Iron	304 Stainless Steel	316 Stainless Steel	Acetal	Buna	CSM (Hypalon)	EPR, EPDM	Fluorocarbon	Fluoroelastomer (FKM)	Geolast (Buna & Polypropylene)	Hastelloy C	TPE	Leather	Nitrile (TS)	Nitrile (TPE)	Nylon	Polychloroprene	Polypropylene	PTFE	PVDF	Santoprene (EPDM & Polypropylene)	UHMWPE	Urethane	
A: Excellent, B: Good, C: Fair to Poor, D: Not recommended																										
- No Data																										
Petroleum Ether	B	-	B	A	A	A	-	-	D	-	A	-	D	-	-	A	A	A	D	A	A	B	-	A	B	
Petroleum Oil, Crude	B	-	B	A	-	A	B	-	D	A	A	-	A	A	-	A	C	A	C	D	A	A	C	A	A	
Petroleum Oils (Refined)	-	-	-	-	-	A	-	-	D	-	A	-	-	A	-	A	B	-	B	B	A	A	C	A	B	
Petroleum Oils (Sour)	B	-	B	A	-	A	-	-	D	-	A	-	A	B	-	B	C	-	B	B	A	A	C	A	B	
Phenethyl Alcohol	A	-	A	A	-	-	D	-	B	D	-	-	A	-	-	-	-	-	D	-	A	-	-	-	-	
Phenol	B	-	D	A	-	A	-	-	-	-	A	-	A	D	-	D	D	-	D	C	A	A	A	C	D	
Phenol (10%)	A	D	D	B	B	B	D	D	B	-	A	-	B	-	-	-	-	D	D	B	A	A	-	-	-	
Phenol (Carbolic Acid)	B	D	D	B	B	D	D	D	C	A	A	-	A	D	-	-	-	D	D	C	A	A	A	C	-	
Phenol Sulfonic Acid	D	-	D	B	B	-	-	-	-	-	D	-	A	-	-	D	-	-	-	-	A	B	-	-	-	
Phenyl Acetate	-	-	-	-	-	-	D	-	B	D	D	-	-	-	-	D	-	-	D	-	A	-	-	-	D	
Phenyl Ethyl Ether	-	-	-	-	-	-	D	-	D	C	C	-	-	-	-	-	-	-	D	-	A	-	C	-	-	
Phenyl Hydrazine	A	-	D	-	-	-	D	-	D	A	A	D	-	-	-	D	-	-	D	D	A	D	B	-	-	
Phenyl Sulfonic Acid	B	-	B	B	-	-	D	-	-	D	-	D	-	-	-	-	-	-	-	-	A	-	-	-	-	
Phenylbenzene	-	-	-	-	-	-	D	-	D	A	A	-	-	-	-	D	-	-	D	-	A	-	C	-	D	
Phorone (Diisopropylidene Acetone)	-	-	-	-	-	-	D	-	C	A	D	-	-	-	-	D	-	-	D	-	A	-	B	A	D	
Phosphate Esters	-	-	-	-	-	-	-	-	A	-	D	-	-	-	-	D	-	-	D	-	A	-	-	-	D	
Phosphoric Acid - 10%	D	-	D	A	-	-	A	-	A	A	-	-	-	-	-	-	-	D	B	A	A	A	A	A	-	
Phosphoric Acid - 20%	D	-	D	A	B	D	C	-	A	A	A	D	A	-	-	B	-	D	B	A	A	A	A	A	C	
Phosphoric Acid - 45%	D	-	D	-	B	-	D	-	-	-	A	-	-	-	-	-	-	D	B	A	A	A	-	-	-	
Phosphoric Acid - 50%	D	-	D	A	-	-	D	-	B	A	-	D	C	-	-	-	-	D	B	A	A	A	B	A	-	
Phosphoric Acid (>40%)	D	D	D	D	D	D	D	B	B	-	A	-	A	D	-	D	-	C	D	A	A	B	C	B	D	
Phosphoric Acid (Concentrated)	D	-	D	A	-	-	D	-	B	A	-	D	-	-	-	-	-	D	B	A	A	A	-	A	-	
Phosphoric Acid (crude)	C	D	D	D	B	D	D	B	B	-	A	-	A	-	-	-	-	B	D	B	A	A	-	-	-	
Phosphoric Acid (molten)	C	-	-	-	C	D	-	-	-	-	-	-	C	-	-	-	-	-	A	D	-	D	-	-	-	
Phosphoric Acid (S40%)	C	D	D	D	C	D	D	B	B	-	A	-	A	-	-	-	-	B	B	A	A	B	-	-	-	
Phosphoric Acid (To 40% Solution)	D	-	D	-	A	-	D	-	-	-	A	-	A	-	-	-	-	D	D	A	A	A	-	-	-	
Phosphoric Acid Aerated	D	D	D	A	B	D	-	-	-	-	-	-	-	-	-	-	-	D	-	B	A	A	-	A	-	
Phosphoric Acid Air Free	D	D	D	D	A	D	-	-	-	-	-	-	-	D	-	-	-	D	-	B	A	A	A	A	-	
Phosphoric Acid Anhydride	C	-	-	-	-	D	D	-	-	-	-	-	-	-	-	-	-	-	A	A	-	D	-	-	-	
Phosphoric Acid Boiling	D	D	D	D	D	D	-	-	-	-	-	-	-	-	-	-	-	D	-	A	A	A	-	D	-	
Phosphoric Acid Crude	D	-	D	-	C	-	D	-	-	-	A	-	A	-	-	-	-	C	D	A	A	A	-	-	-	
Phosphorous Oxychloride	B	-	B	B	-	-	-	-	-	-	-	-	B	-	-	-	-	-	D	-	A	-	-	-	-	
Phosphorous Trichloride Acid	D	-	B	A	A	D	D	-	A	-	A	-	A	-	-	D	D	-	D	D	A	A	B	A	-	
Phosphorus	B	A	A	A	A	B	-	-	-	-	-	-	A	-	-	-	-	-	-	B	A	A	-	A	-	

# CHEMICAL COMPATIBILITY FOR DIAPHRAGM PUMPS

CHEMICALS	METALS					PLASTICS, ELASTOMERS & LEATHER																				
	Aluminum	Carbon Steel	Cast/Ductile Iron	304 Stainless Steel	316 Stainless Steel	Acetal	Buna	CSM (Hypalon)	EPR, EPDM	Fluorocarbon	Fluoroelastomer (FKM)	Geolast (Buna & Polypropylene)	Hastelloy C	TPE	Leather	Nitrile (TS)	Nitrile (TPE)	Nylon	Polychloroprene	Polypropylene	PTFE	PVDF	Santoprene (EPDM & Polypropylene)	UHMWPE	Urethane	
A: Excellent, B: Good, C: Fair to Poor, D: Not recommended  - No Data																										
Phosphorus Pentachloride	-	-	-	-	B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	B	A	A	-	-	-	
Phosphorus Trichloride	D	-	B	A	A	D	D	D	A	A	A	D	A	-	-	-	-	-	D	D	A	A	B	A	-	
Photographic Developer	C	D	D	A	A	D	A	A	B	A	A	A	B	D	-	A	B	B	A	A	A	A	A	A	B	
Photographic Solutions	A	D	D	D	A	D	B	A	A	-	B	-	B	D	-	-	-	A	B	A	A	B	-	A	-	
Phthalic Acid	B	-	A	B	B	C	D	A	A	-	A	D	B	-	-	C	D	B	C	B	A	A	-	A	-	
Phthalic Anhydride	A	A	A	A	A	C	D	-	A	-	A	D	A	-	-	C	-	-	A	D	A	A	-	-	-	
Pickling Solution	-	-	-	-	-	D	-	-	D	B	B	-	A	D	-	D	D	-	D	-	A	-	A	A	C	
Picric Acid	D	D	D	D	D	D	C	B	C	A	A	B	D	D	A	D	B	D	C	D	A	A	B	A	C	
Pine Oil	A	C	C	A	A	A	D	D	D	A	A	B	-	D	A	B	B	A	D	D	A	B	C	C	D	
Pinene	-	-	-	-	-	-	B	-	D	A	A	-	-	D	-	B	B	-	D	-	A	-	C	A	D	
Piperidine	-	-	-	-	-	-	D	-	D	D	D	-	-	D	-	D	-	-	D	-	A	-	B	-	D	
Pitch	-	-	-	-	-	-	-	-	D	-	A	-	-	D	-	A	A	-	D	-	A	-	-	-	D	
Plating Solutions - Antimony	D	A	A	A	A	A	A	-	-	-	A	-	A	-	-	A	B	D	A	A	A	A	A	A	-	
Plating Solutions - Arsenic	C	A	A	A	A	A	A	-	-	-	A	-	A	-	-	A	B	A	A	A	A	A	A	A	-	
Plating Solutions - Brass	C	A	A	A	A	A	A	-	A	-	A	-	A	-	-	A	B	A	A	A	A	B	A	A	-	
Plating Solutions - Brass (High-Speed Bath 110°F)	A	A	A	-	A	A	A	-	-	-	A	-	A	-	-	-	-	A	A	A	A	B	-	-	-	
Plating Solutions - Bronze	C	A	A	A	A	B	A	-	A	-	A	-	A	-	-	A	B	A	A	A	A	A	A	A	-	
Plating Solutions - Bronze (Cu-Sn Bronze Bath 160°F)	A	A	A	A	A	B	A	-	A	-	A	-	A	-	-	-	-	A	A	A	A	A	-	-	-	
Plating Solutions - Bronze (Cu-Zn Bronze Bath 100°F)	A	A	A	A	A	A	A	-	-	-	A	-	A	-	-	-	-	A	A	A	A	A	-	-	-	
Plating Solutions - Cadmium	C	-	A	-	A	-	A	-	-	-	A	-	D	-	-	-	-	A	A	A	A	B	-	A	-	
Plating Solutions - Cadmium (Cyanide Bath 90°F)	A	A	A	-	A	A	A	-	-	-	A	-	A	-	-	-	-	A	A	A	A	A	-	-	-	
Plating Solutions - Cadmium (Fluoborate Bath 100°F)	A	D	D	A	A	C	B	-	-	-	A	-	D	-	-	-	-	D	C	A	A	A	-	-	-	
Plating Solutions - Cadmium	C	-	A	A	-	D	B	-	B	-	A	-	A	-	-	A	B	B	A	A	A	A	A	A	-	
Plating Solutions - Chrome	D	-	D	A	A	D	D	-	C	A	A	-	D	-	-	D	D	D	D	A	A	B	A	A	-	
Plating Solutions - Chrome (Barrel Chrome Bath 95°F)	A	C	C	-	D	D	D	-	-	-	C	-	D	-	-	-	-	D	D	A	A	C	-	-	-	
Plating Solutions - Chrome (Black Chrome Bath 115°F)	A	A	A	-	C	D	C	-	-	-	C	-	D	-	-	-	-	D	D	A	A	C	-	-	-	
Plating Solutions - Chrome (Chromic-Sulfuric Bath 130°F)	A	A	A	-	C	D	D	-	-	-	C	-	D	-	-	-	-	D	D	A	A	C	-	-	-	
Plating Solutions - Chrome (Fluoride Bath 130°F)	A	C	C	-	D	D	D	-	-	-	C	-	D	-	-	-	-	D	D	A	A	C	-	-	-	
Plating Solutions - Chrome (Fluosilicate Bath 95°F)	A	C	C	-	C	D	D	-	-	-	C	-	D	-	-	-	-	D	D	D	A	C	-	-	-	
Plating Solutions - Copper	C	-	A	A	-	-	A	-	A	-	A	-	D	-	-	A	B	A	A	A	A	B	A	A	D	
Plating Solutions - Copper (Copper Fluoborate Bath 120°F)	A	D	D	A	D	C	B	-	-	-	A	-	D	-	-	-	-	D	C	A	A	A	-	-	-	
Plating Solutions - Copper (Copper Sulfate Bath R.T.)	A	A	A	-	D	A	A	-	-	-	A	-	D	-	-	-	-	D	A	A	A	A	-	-	-	
Plating Solutions - Copper (Electroless)	A	-	-	-	-	D	D	-	-	-	A	-	-	-	-	-	-	A	D	A	A	A	-	-	-	
Plating Solutions - Copper (High-Speed Bath 180°F)	A	A	A	-	A	B	A	-	-	-	A	-	A	-	-	-	-	A	B	A	A	A	-	-	-	

# CHEMICAL COMPATIBILITY FOR DIAPHRAGM PUMPS

CHEMICALS	METALS					PLASTICS, ELASTOMERS & LEATHER																				
	Aluminum	Carbon Steel	Cast/Ductile Iron	304 Stainless Steel	316 Stainless Steel	Acetal	Buna	CSM (Hypalon)	EPR, EPDM	Fluorocarbon	Fluoroelastomer (FKM)	Geolast (Buna & Polypropylene)	Hastelloy C	TPE	Leather	Nitrile (TS)	Nitrile (TPE)	Nylon	Polychloroprene	Polypropylene	PTFE	PVDF	Santoprene (EPDM & Polypropylene)	UHMWPE	Urethane	
A: Excellent, B: Good, C: Fair to Poor, D: Not recommended  - No Data																										
Plating Solutions - Copper (Pyrophosphate)	A	A	A	-	A	A	A	-	-	-	A	-	A	-	-	-	-	A	A	A	A	A	A	-	-	-
Plating Solutions - Copper (Rochelle Salt Bath 150°F)	A	A	A	-	A	B	A	-	-	-	A	-	A	-	-	-	-	A	B	A	A	A	A	-	-	-
Plating Solutions - Copper (Copper Strike Bath 120°F)	-	A	A	-	A	A	A	-	-	-	A	-	A	-	-	-	-	A	A	A	A	A	B	-	-	-
Plating Solutions - Gold	C	-	-	A	D	-	A	-	A	-	A	-	A	-	-	A	B	A	A	A	A	A	B	A	A	-
Plating Solutions - Gold (Acid 75°F)	-	-	-	-	C	-	A	-	-	-	A	-	A	-	-	-	-	A	A	A	A	A	-	-	-	-
Plating Solutions - Gold (Cyanide 150°F)	-	-	-	-	A	-	A	-	-	-	A	-	A	-	-	-	-	A	A	A	A	A	-	-	-	-
Plating Solutions - Gold (Neutral 75°F)	-	-	-	-	C	-	A	-	-	-	A	-	A	-	-	-	-	A	A	A	A	A	-	-	-	-
Plating Solutions - Indium	C	-	-	A	C	-	A	-	-	-	A	-	A	-	-	A	B	D	A	A	A	A	-	A	A	-
Plating Solutions - Iron	C	-	-	A	A	-	A	-	-	-	A	-	A	-	-	A	B	D	A	A	A	A	A	A	A	-
Plating Solutions - Iron (Ferrous Chloride Bath 190°F)	-	-	-	-	D	-	B	-	-	-	A	-	D	-	-	-	-	D	D	C	A	A	-	-	-	-
Plating Solutions - Iron (Fluoborate Bath 145°F)	-	-	-	-	D	-	B	-	-	-	A	-	B	-	-	-	-	D	C	A	A	A	-	-	-	-
Plating Solutions - Iron (Sulfamate 140°F)	-	-	-	-	D	-	A	-	-	-	A	-	B	-	-	-	-	D	A	A	A	A	-	-	-	-
Plating Solutions - Iron (Sulfate-Chloride Bath 160°F)	-	-	-	-	D	-	B	-	-	-	A	-	D	-	-	-	-	D	C	A	A	A	-	-	-	-
Plating Solutions - Iron (Ferrous Am Sulfate Bath 150°F)	-	-	-	-	C	-	A	-	-	-	A	-	A	-	-	-	-	D	B	A	A	A	-	-	-	-
Plating Solutions - Iron (Ferrous Sulfate Bath 150°F)	-	-	-	-	C	-	A	-	-	-	A	-	A	-	-	-	-	D	B	A	A	A	-	-	-	-
Plating Solutions - Lead	C	-	-	A	C	A	B	-	A	-	A	-	A	-	-	B	C	D	B	A	A	A	B	A	C	-
Plating Solutions - Nickel	C	-	-	A	A	-	A	-	A	-	A	-	A	-	-	A	B	A	A	A	A	A	A	A	A	-
Plating Solutions - Nickel (Electroless 200°F)	-	-	-	-	-	-	D	-	-	-	A	-	-	-	-	-	-	D	D	D	A	A	-	-	-	-
Plating Solutions - Nickel (Fluoborate 100-170°F)	-	-	-	-	C	-	B	-	-	-	A	-	A	-	-	-	-	D	A	A	A	A	-	-	-	-
Plating Solutions - Nickel (High-Chloride 130-160°F)	-	-	-	-	C	-	A	-	-	-	A	-	A	-	-	-	-	D	B	A	A	A	-	-	-	-
Plating Solutions - Nickel (Sulfamate 100-140°F)	-	-	-	-	C	-	A	-	-	-	A	-	A	-	-	-	-	A	A	A	A	A	-	-	-	-
Plating Solutions - Nickel (Watts Type 115-160°F)	-	-	-	-	C	-	A	-	-	-	A	-	A	-	-	-	-	A	A	A	A	A	-	-	-	-
Plating Solutions - Others	-	-	-	A	-	-	A	-	A	B	-	-	-	-	-	-	-	-	C	-	A	-	A	A	-	-
Plating Solutions - Silver	C	-	-	A	A	-	A	-	A	-	A	-	A	-	-	A	B	A	A	A	A	A	A	A	A	-
Plating Solutions - Silver (80-120°F)	-	-	-	-	A	-	A	-	A	-	A	-	A	-	-	-	-	A	A	A	A	A	-	-	-	-
Plating Solutions - Tin	C	-	-	B	A	-	A	-	A	-	A	-	A	-	-	B	B	D	A	A	A	A	B	A	A	-
Plating Solutions - Tin (Fluoborate Plating 100°F)	-	-	-	-	C	-	B	-	-	-	A	-	A	-	-	-	-	D	C	A	A	A	-	-	-	-
Plating Solutions - Tin (Lead Plating 100°F)	-	-	-	-	C	-	B	-	-	-	A	-	A	-	-	-	-	D	C	A	A	A	-	-	-	-
Plating Solutions - Zinc	C	-	-	A	A	-	A	-	A	-	A	-	A	-	-	A	B	D	A	A	A	A	B	A	A	-
Plating Solutions - Zinc (Acid Chloride 140°F)	-	-	-	-	D	-	A	-	-	-	A	-	D	-	-	-	-	D	A	A	A	A	-	-	-	-
Plating Solutions - Zinc (Acid Fluoborate Bath R.T.)	-	-	-	-	C	-	B	-	-	-	A	-	A	-	-	-	-	D	C	A	A	A	-	-	-	-
Plating Solutions - Zinc (Acid Sulfate Bath 150°F)	-	-	-	-	C	-	A	-	-	-	A	-	A	-	-	-	-	D	B	A	A	A	-	-	-	-
Plating Solutions - Zinc (Alkaline Cyanide Bath R.T.)	-	-	-	-	A	-	A	-	-	-	A	-	A	-	-	-	-	A	A	A	A	A	-	-	-	-
Plating Solutions - Rhodium Plating 120°F	-	-	-	-	D	-	A	-	A	-	A	-	D	-	-	-	-	D	B	A	A	A	-	-	-	-

# CHEMICAL COMPATIBILITY FOR DIAPHRAGM PUMPS

CHEMICALS	METALS					PLASTICS, ELASTOMERS & LEATHER																				
	Aluminum	Carbon Steel	Cast/Ductile Iron	304 Stainless Steel	316 Stainless Steel	Acetal	Buna	CSM (Hypalon)	EPR, EPDM	Fluorocarbon	Fluoroelastomer (FKM)	Geolast (Buna & Polypropylene)	Hastelloy C	TPE	Leather	Nitrile (TS)	Nitrile (TPE)	Nylon	Polychloroprene	Polypropylene	PTFE	PVDF	Santoprene (EPDM & Polypropylene)	UHMWPE	Urethane	
A: Excellent, B: Good, C: Fair to Poor, D: Not recommended																										
- No Data																										
Polyvinyl Acetate Emulsion	-	-	B	-	-	A	-	-	A	-	D	-	-	-	-	A	B	-	C	B	A	A	A	-	-	
Potash (Potassium Carbonate)	D	C	C	B	B	B	A	-	A	-	A	A	B	D	-	-	-	A	B	A	A	A	-	-	-	
Potassium Acetate	D	B	B	B	B	A	B	-	A	D	D	A	B	-	-	B	B	B	B	A	A	A	A	A	D	
Potassium Aluminum Sulfate	C	-	D	D	B	A	-	-	-	-	-	-	-	-	-	-	-	D	-	A	A	A	-	A	-	
Potassium Bicarbonate	D	B	B	B	B	C	A	-	A	A	A	A	B	-	A	A	A	A	A	A	A	A	B	A	D	
Potassium Bichromate	B	-	B	B	B	C	-	-	-	-	-	-	-	B	-	-	-	D	-	A	A	B	-	A	-	
Potassium Bisulfate	A	-	D	A	-	-	A	-	-	A	-	A	-	-	-	-	-	-	A	A	A	A	-	A	-	
Potassium Bisulfite	B	-	-	B	-	-	A	-	A	A	A	A	B	-	-	A	A	-	A	A	A	A	-	-	A	
Potassium Bromide	D	D	D	D	B	A	A	-	A	A	A	A	B	-	A	A	A	A	A	A	A	A	A	A	D	
Potassium Carbonate (Potash)	D	B	B	B	B	B	A	-	A	A	A	-	B	D	-	A	A	C	B	A	A	A	A	A	D	
Potassium Chlorate	D	C	C	B	B	B	A	-	A	A	A	A	B	-	A	A	A	D	A	A	A	A	A	A	A	
Potassium Chloride	D	D	D	C	C	B	A	A	A	A	A	A	B	D	A	A	A	B	A	A	A	A	A	A	A	
Potassium Chromate	B	B	B	B	B	D	A	-	A	A	A	A	A	-	A	A	A	B	A	A	A	B	A	A	B	
Potassium Copper Cyanide	-	-	-	-	-	-	A	-	A	A	-	-	-	-	-	-	-	-	A	A	A	A	-	-	-	
Potassium Cupro Cyanide	-	-	-	-	-	C	A	-	B	-	A	-	-	-	-	A	-	-	A	A	A	A	A	-	-	
Potassium Cyanide	D	B	B	B	B	C	A	A	A	A	A	A	B	B	A	A	A	A	B	A	A	A	A	A	A	
Potassium Dichromate	B	B	B	B	B	D	A	A	A	A	A	A	B	C	-	A	A	D	A	A	A	A	A	A	B	
Potassium Ferricyanide	B	C	C	B	B	B	D	A	A	-	A	D	B	-	-	C	-	B	A	A	A	A	-	A	-	
Potassium Ferrocyanide	B	C	C	B	B	B	D	-	A	-	A	D	B	-	-	-	-	B	A	A	A	A	-	-	-	
Potassium Hydrate	D	-	B	A	B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	-	-	-	
Potassium Hydroxide	D	B	C	B	A	C	B	A	A	B	D	-	B	D	-	B	A	D	B	A	A	A	A	A	B	
Potassium Hypochlorite	D	A	D	D	B	D	A	A	A	-	D	A	B	-	-	B	B	B	B	D	B	B	-	-	B	
Potassium Iodide	B	A	A	B	A	-	A	A	A	A	A	A	B	-	-	A	B	A	A	A	A	A	-	B	-	
Potassium Nitrate	B	A	B	B	B	B	A	A	A	A	A	A	B	B	A	A	A	D	A	A	A	A	A	A	A	
Potassium Nitrite	B	-	B	B	-	-	A	-	A	A	-	-	B	-	-	-	-	-	A	-	A	-	-	-	-	
Potassium Oxalate	B	A	A	B	B	-	-	-	-	-	-	-	A	-	-	-	-	-	-	-	-	A	-	-	-	
Potassium Permanganate	B	B	B	B	B	C	C	-	A	B	A	D	A	D	-	B	D	D	C	B	A	A	A	A	B	
Potassium Phosphate	D	-	D	B	-	-	A	-	A	A	A	-	B	-	-	A	-	-	A	-	A	-	-	-	C	
Potassium Salts	-	-	-	-	-	-	-	-	A	-	A	-	-	-	-	A	A	-	A	-	A	-	-	-	A	
Potassium Silicate	B	-	B	B	-	-	A	-	A	A	-	-	B	-	-	-	-	-	A	-	A	-	-	-	-	
Potassium Silicide	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	-	-	-	
Potassium Sulfate	C	A	B	B	B	B	A	A	A	A	A	A	B	B	-	A	A	B	A	A	A	A	A	A	A	
Potassium Sulfide	D	B	B	B	B	-	A	B	A	A	A	A	B	-	-	A	A	A	A	A	A	A	-	A	A	
Potassium Sulfite	A	A	D	B	A	-	A	-	A	A	A	-	-	-	-	A	A	-	A	A	A	A	-	A	A	



# CHEMICAL COMPATIBILITY FOR DIAPHRAGM PUMPS

CHEMICALS	METALS					PLASTICS, ELASTOMERS & LEATHER																				
	Aluminum	Carbon Steel	Cast/Ductile Iron	304 Stainless Steel	316 Stainless Steel	Acetal	Buna	CSM (Hypalon)	EPR, EPDM	Fluorocarbon	Fluoroelastomer (FKM)	Geolast (Buna & Polypropylene)	Hastelloy C	TPE	Leather	Nitrile (TS)	Nitrile (TPE)	Nylon	Polychloroprene	Polypropylene	PTFE	PVDF	Santoprene (EPDM & Polypropylene)	UHMWPE	Urethane	
A: Excellent, B: Good, C: Fair to Poor, D: Not recommended  - No Data																										
Potassium Triphosphate	-	-	-	-	-	-	-	-	B	-	-	-	-	A	-	-	A	-	-	-	D	-	-	A	A	
PRL-High Temp. Hydr. Oil	-	-	-	-	-	-	-	-	D	-	A	-	-	-	-	B	B	-	B	-	A	-	-	A	B	
Producer Gas	-	-	-	-	-	A	A	-	D	-	A	-	-	-	-	A	-	-	B	-	A	-	-	D	A	
Propane	A	A	A	A	A	A	A	-	D	-	A	-	-	B	-	-	-	A	B	D	A	A	-	A	-	
Propane (Liquified)	A	A	A	A	A	A	A	-	D	-	A	A	A	B	-	A	B	A	C	B	A	B	-	C	B	
Propane (LPG)	A	-	B	A	-	A	A	-	D	A	A	-	A	B	-	A	B	C	B	D	A	A	C	C	B	
Propane Propionitrile	-	-	-	-	-	-	-	-	D	-	A	-	-	-	-	A	-	-	B	-	A	-	-	A	D	
Propionaidehyde (Propanol)	A	-	A	A	-	-	D	-	A	D	D	-	A	-	-	D	-	-	D	-	A	-	-	-	D	
Propionic Acid	A	-	D	B	-	-	D	-	A	A	D	-	A	-	-	D	-	-	D	-	A	-	A	-	D	
Propyl Acetate	A	A	A	A	A	A	D	-	B	-	D	A	A	-	-	D	D	-	D	C	A	A	B	-	D	
Propyl Alcohol	A	-	-	A	-	-	A	-	-	A	-	-	A	-	-	-	-	-	A	A	A	A	A	A	-	
Propyl Alcohol	A	A	A	A	A	A	B	-	A	A	A	-	A	-	-	A	B	D	B	A	A	B	A	A	D	
Propyl Nitrate	B	-	D	A	-	A	-	-	B	-	D	-	-	-	-	D	-	-	D	C	A	D	B	-	D	
Propylene	A	A	A	B	A	A	D	D	D	A	A	D	A	-	-	D	-	-	D	A	A	A	B	A	D	
Propylene Chlorohydrin	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	A	-	-	-	
Propylene Dichloride	D	-	A	A	-	-	D	-	D	B	A	-	B	-	-	D	-	-	D	-	A	-	-	D	D	
Propylene Glycol	B	A	B	B	B	D	A	A	A	A	A	-	B	-	-	A	A	B	C	A	A	A	A	B	B	
Propylene Oxide	B	B	B	A	A	A	D	-	C	D	D	-	-	-	-	D	D	-	D	D	A	D	A	A	D	
Pryanol, Transformer Oil	-	-	-	-	-	-	-	-	D	-	A	-	-	-	-	A	-	-	D	-	A	-	-	C	B	
P-Tertiary Butyl Catechol	C	-	B	B	-	A	-	-	B	-	A	-	-	-	-	D	-	-	B	-	A	-	B	-	-	
Pydraul	A	-	A	A	A	-	D	-	B	A	A	-	A	B	-	-	-	C	D	-	A	-	A	-	-	
Pyranol	-	-	-	-	-	-	A	-	-	A	A	-	-	-	-	-	-	-	D	-	A	-	-	-	-	
Pyridine	B	B	B	B	B	C	D	D	C	D	D	D	B	C	-	D	-	D	D	C	A	D	A	D	D	
Pyrogallic Acid	B	D	D	D	B	D	-	-	B	-	A	-	B	-	-	D	-	-	A	A	A	B	-	C	D	
Pyroligneous Acid (Wood Vinegar)	D	-	D	B	B	D	D	-	C	A	D	D	-	-	-	D	D	D	D	B	A	B	-	D	D	
Pyrolube	-	-	-	-	-	-	-	-	B	-	A	-	-	-	-	D	-	-	D	-	A	-	A	-	D	
Pyrrrole	-	-	-	-	-	-	D	-	D	C	D	-	-	-	-	D	-	-	D	-	A	-	C	-	-	
Quaternary Ammonium Salts	-	-	D	A	-	-	A	-	-	A	A	-	-	-	-	A	-	-	A	-	A	-	-	-	-	
Quench Oil	A	-	-	A	-	-	B	-	D	A	A	-	A	-	-	A	-	-	D	-	A	-	-	-	A	
Quinine Bisulfate	-	-	-	B	B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	-	-	-	-	
Quinine Bisulphate (Dry)	D	-	D	B	-	D	-	-	A	-	A	-	A	-	-	A	D	-	A	D	A	D	-	A	A	
Quinine Sulfate	-	-	-	B	B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	A	-	-	-	-	
Quinine Sulphate (Dry)	D	-	D	A	-	D	-	-	A	-	A	-	A	-	-	A	D	-	A	D	A	D	-	A	A	
Radiation	-	-	-	-	-	D	B	-	C	-	D	-	-	-	-	B	-	-	C	-	A	-	-	-	B	

# CHEMICAL COMPATIBILITY FOR DIAPHRAGM PUMPS

CHEMICALS	METALS					PLASTICS, ELASTOMERS & LEATHER																				
	Aluminum	Carbon Steel	Cast/Ductile Iron	304 Stainless Steel	316 Stainless Steel	Acetal	Buna	CSM (Hypalon)	EPR, EPDM	Fluorocarbon	Fluoroelastomer (FKM)	Geolast (Buna & Polypropylene)	Hastelloy C	TPE	Leather	Nitrile (TS)	Nitrile (TPE)	Nylon	Polychloroprene	Polypropylene	PTFE	PVDF	Santoprene (EPDM & Polypropylene)	UHMWPE	Urethane	
A: Excellent, B: Good, C: Fair to Poor, D: Not recommended  - No Data																										
Rapeseed Oil	-	A	A	A	A	A	D	D	A	A	A	A	A	-	-	B	-	-	D	D	A	A	B	D	B	
Red Line Oil	-	-	-	-	-	-	A	-	D	-	A	-	-	-	-	A	-	-	C	-	A	-	-	-	A	
Resorcinol	-	-	-	-	-	-	-	-	B	-	A	-	-	D	-	-	-	D	D	A	A	-	D	-	-	
RJ-1 (Mil-F-25558)	-	-	-	-	-	-	-	-	D	-	A	-	-	-	-	A	-	-	B	-	-	-	-	A	B	
Rose Oil	-	-	-	A	-	-	-	-	-	A	A	-	-	-	-	-	-	-	C	-	A	-	A	-	A	
Rosin	B	D	D	B	B	B	A	B	D	-	A	A	A	-	-	A	A	A	C	A	A	-	A	D	D	
Rosin Oil	B	-	-	A	A	-	A	-	A	A	A	A	A	-	-	-	-	A	A	A	A	A	-	-	-	
Rosin Paper Mill	A	-	D	A	-	B	-	-	A	-	A	-	A	-	-	A	-	-	A	A	A	-	A	D	D	
Rotenone X	-	-	-	-	-	-	-	-	A	-	A	-	-	-	-	A	-	-	A	-	A	-	-	-	-	
RP-1 (Mil-R-25576)	-	-	-	-	-	-	-	-	D	-	A	-	-	-	-	A	-	-	C	-	-	-	-	A	C	
Rubber Latex Emulsions	A	-	-	A	-	-	-	-	-	A	-	A	A	-	-	-	-	-	-	-	A	-	-	-	-	
Rubber Solvents	A	-	-	A	-	-	D	-	-	D	-	-	A	-	-	-	-	-	C	-	A	-	-	-	-	
Rum	-	-	-	A	A	A	A	A	A	B	B	A	A	-	-	A	A	A	A	A	A	-	A	-	D	
Rust Inhibitors	-	C	C	A	A	A	A	-	-	A	A	A	-	-	-	A	A	-	C	A	-	-	B	-	A	
Sal Ammoniac	D	-	D	B	A	D	A	-	A	A	A	-	A	A	-	A	-	B	A	A	A	A	A	A	A	
Sal Soda	D	-	A	A	-	-	A	-	A	A	A	-	A	-	-	A	A	-	A	-	A	-	B	-	-	
Salad Dressings	B	D	D	A	A	A	A	-	D	A	D	A	-	D	-	D	D	A	D	A	-	-	A	-	D	
Salicylaldehyde	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	B	A	A	-	-	-	
Salicylic Acid	B	A	D	B	B	D	B	A	A	B	A	B	A	-	-	A	A	A	D	B	A	A	A	A	-	
Salt Brine	C	D	D	B	D	B	A	A	A	-	A	-	A	A	-	-	-	A	A	A	A	A	-	A	-	
Salt Water	D	D	D	C	B	A	A	-	A	A	A	-	A	A	A	A	A	A	B	A	A	A	A	A	D	
Sannic Fluorborate	D	-	D	-	-	C	-	-	-	-	A	-	-	-	-	A	-	-	A	-	-	-	-	-	-	
Santo Safe 300	-	-	-	-	-	-	-	-	C	-	A	-	-	B	-	D	-	-	D	-	A	-	-	A	-	
Sea Water	D	D	D	C	C	A	A	A	A	-	A	A	A	A	A	A	A	A	B	A	A	A	A	A	A	
Sea Water (Brine)	A	-	C	A	-	A	A	-	A	A	-	-	A	-	-	-	-	A	B	A	A	A	A	A	-	
Sesame Seed Oil	A	A	A	A	A	D	A	-	-	A	A	A	-	-	-	A	A	-	D	A	A	A	B	-	-	
Sewage	D	D	D	A	A	A	A	-	C	A	A	-	A	B	-	A	A	-	B	A	A	A	A	A	D	
Shellac	A	A	A	A	A	B	-	-	A	-	A	-	A	D	-	A	A	A	D	A	A	-	A	D	D	
Shellac (Bleached)	A	A	A	A	A	A	A	A	D	-	A	A	-	-	-	-	-	A	B	A	A	-	-	-	-	
Shellac (Orange)	A	A	A	A	A	A	A	-	D	-	A	-	-	-	-	-	-	A	D	A	A	-	-	-	-	
Silicate Esters	-	-	-	-	-	-	B	-	D	A	A	-	-	C	-	A	A	-	B	-	A	-	B	D	B	
Silicone	B	A	A	A	A	A	A	A	A	-	A	A	-	A	-	-	-	A	A	A	A	A	-	-	-	
Silicone Grease	-	-	-	-	-	A	A	-	A	-	A	A	-	A	-	A	A	-	A	-	A	-	B	A	A	
Silicone Oil	B	A	B	A	A	A	A	A	A	A	A	A	A	B	-	A	A	A	D	A	A	A	C	A	A	

# CHEMICAL COMPATIBILITY FOR DIAPHRAGM PUMPS

CHEMICALS	METALS					PLASTICS, ELASTOMERS & LEATHER																				
	Aluminum	Carbon Steel	Cast/Ductile Iron	304 Stainless Steel	316 Stainless Steel	Acetal	Buna	CSM (Hypalon)	EPR, EPDM	Fluorocarbon	Fluoroelastomer (FKM)	Geolast (Buna & Polypropylene)	Hastelloy C	TPE	Leather	Nitrile (TS)	Nitrile (TPE)	Nylon	Polychloroprene	Polypropylene	PTFE	PVDF	Santoprene (EPDM & Polypropylene)	UHMWPE	Urethane	
A: Excellent, B: Good, C: Fair to Poor, D: Not recommended																										
- No Data																										
Silicone Tetrachloride Wet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Silver Bromide	D	D	D	D	D	C	-	-	-	-	-	-	A	-	-	-	-	-	-	-	-	A	-	-	-	-
Silver Chloride	D	D	D	D	D	-	-	-	-	-	-	-	-	-	-	-	D	-	-	-	B	A	-	-	-	-
Silver Cyanide	D	-	A	A	A	-	-	-	A	-	A	-	A	-	-	A	A	-	A	A	A	A	A	-	A	D
Silver Nitrate	D	C	D	B	B	A	C	A	A	A	A	B	A	D	-	B	C	A	A	B	A	A	A	A	A	A
Skydol 7000	-	-	-	A	-	A	-	-	A	-	B	-	A	D	-	D	-	-	D	-	A	-	B	-	D	D
Skydrol	-	-	-	-	-	-	D	-	A	-	D	-	-	B	-	-	-	C	D	-	A	-	A	-	-	-
Skydrol 500	-	-	-	A	-	A	D	-	A	-	D	D	A	C	-	D	D	C	D	-	A	-	B	-	D	D
Skydrol 7000	-	-	-	-	-	-	D	-	A	-	B	-	-	D	-	-	-	C	D	-	A	-	-	-	-	-
Skydrol Hydraulic Fluid	-	-	-	A	-	-	D	-	A	C	-	D	A	-	-	-	-	C	D	-	A	-	B	-	-	-
Soap Solutions	D	A	D	A	A	A	A	A	A	A	A	A	A	A	-	A	A	A	B	A	A	A	A	A	A	A
Soda Ash	D	B	B	A	A	A	A	A	A	A	A	-	A	B	-	-	-	B	A	A	A	A	A	A	-	-
Sodium Acetate	B	B	D	B	B	B	C	-	A	D	D	A	A	-	-	-	-	B	C	A	A	A	A	A	-	-
Sodium Acid Sulfate	D	-	C	D	B	-	-	-	A	-	A	-	-	-	-	A	A	-	A	A	A	A	-	A	A	A
Sodium Aluminate	C	A	A	A	A	B	A	A	A	A	A	A	B	-	-	A	A	A	A	A	A	A	A	A	-	-
Sodium Aluminum Sulfate	D	-	D	D	A	-	-	-	A	-	A	-	B	-	-	A	A	-	A	-	A	-	A	-	A	A
Sodium Benzoate	A	-	-	-	-	-	B	B	A	-	A	B	A	-	-	-	-	B	A	A	A	A	-	A	-	-
Sodium Bicarbonate	D	C	C	A	B	D	A	A	A	A	A	A	B	B	-	A	A	B	A	A	A	A	A	A	A	A
Sodium Bichromate	C	-	C	B	B	D	-	-	A	-	A	-	C	-	-	A	B	D	A	A	A	A	A	A	A	A
Sodium Bisulfate	D	D	D	D	C	B	B	A	A	-	A	A	B	D	-	A	A	C	A	A	A	A	A	A	A	A
Sodium Bisulfite	D	D	D	C	B	D	C	A	A	A	A	A	B	D	-	A	A	D	A	A	A	A	A	A	A	A
Sodium Borate	C	-	C	C	B	C	A	-	A	A	A	-	A	B	-	-	-	A	A	A	A	A	A	A	-	-
Sodium Borate (Borax)	C	-	B	B	B	A	A	A	A	-	A	-	A	B	-	A	A	A	A	A	A	A	A	A	A	A
Sodium Bromide	D	C	C	C	C	A	-	B	A	-	A	-	B	-	-	-	-	B	A	A	A	A	A	A	-	-
Sodium Carbonate	D	B	B	A	A	A	A	A	A	-	A	A	A	B	-	A	A	B	A	A	A	A	A	A	A	A
Sodium Chlorate	C	-	B	B	B	B	B	A	A	A	A	A	B	-	-	A	A	D	B	A	A	A	A	A	A	A
Sodium Chloride	C	D	D	C	C	B	A	A	A	A	A	A	A	A	-	A	A	A	A	A	A	A	A	A	A	A
Sodium Chromate	D	A	B	B	B	D	A	C	-	A	A	A	A	-	-	A	A	D	A	A	A	A	A	A	-	-
Sodium Citrate	-	-	-	B	-	-	-	-	-	-	-	-	B	-	-	-	D	-	-	-	A	-	A	A	-	-
Sodium Cyanide	D	A	B	A	B	C	A	A	A	A	A	A	A	B	-	A	A	B	A	A	A	A	A	A	A	A
Sodium Dichromate	-	-	-	-	-	-	-	-	A	A	B	-	-	B	-	A	A	D	B	A	A	A	A	A	A	B
Sodium Ferrocyanide	A	-	D	B	B	A	A	B	A	-	A	A	B	-	-	A	A	-	A	A	A	A	A	A	A	-
Sodium Fluoride	B	C	C	D	D	-	A	B	A	A	A	A	B	-	-	A	A	B	A	A	A	A	A	A	A	B
Sodium Hexametaphosphate	C	-	B	B	-	-	B	-	B	A	-	-	A	-	-	-	-	-	B	-	A	-	-	-	-	-

# CHEMICAL COMPATIBILITY FOR DIAPHRAGM PUMPS

CHEMICALS	METALS					PLASTICS, ELASTOMERS & LEATHER																				
	Aluminum	Carbon Steel	Cast/Ductile Iron	304 Stainless Steel	316 Stainless Steel	Acetal	Buna	CSM (Hypalon)	EPR, EPDM	Fluorocarbon	Fluoroelastomer (FKM)	Geolast (Buna & Polypropylene)	Hastelloy C	TPE	Leather	Nitrile (TS)	Nitrile (TPE)	Nylon	Polychloroprene	Polypropylene	PTFE	PVDF	Santoprene (EPDM & Polypropylene)	UHMWPE	Urethane	
A: Excellent, B: Good, C: Fair to Poor, D: Not recommended																										
- No Data																										
Sodium Hydrosulfate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	-
Sodium Hydrosulfite	A	-	-	-	-	-	C	B	B	-	A	D	A	-	-	-	-	A	B	-	A	-	-	-	-	-
Sodium Hydroxide	D	-	B	A	-	D	B	-	A	D	-	-	B	-	-	-	-	C	B	A	A	A	A	A	A	-
Sodium Hydroxide (< 10%) (Caustic Soda)	-	-	-	-	-	-	-	-	-	-	-	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sodium Hydroxide (< 50%) (Caustic Soda)	-	-	-	-	-	-	-	-	-	-	-	D	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sodium Hydroxide (20%)	D	A	B	B	B	A	A	A	B	-	C	-	B	B	-	A	B	A	B	A	A	A	A	A	A	B
Sodium Hydroxide (50%)	D	D	D	B	B	A	D	A	B	-	D	-	C	C	-	D	D	A	C	A	A	C	A	A	A	B
Sodium Hydroxide (80%)	D	D	D	D	D	D	D	A	B	-	D	-	B	D	-	D	D	C	C	A	A	C	-	A	B	
Sodium Hydroxide (Caustic Soda-Lye)	A	-	-	A	A	D	B	-	A	-	B	-	-	-	-	-	-	C	A	A	A	D	-	A	-	
Sodium Hypochlorite	D	D	D	D	A	D	D	-	C	B	D	B	B	-	-	-	-	D	B	D	A	B	A	A	-	
Sodium Hypochlorite (<20%)	D	D	D	C	C	D	C	A	B	-	C	-	A	C	-	D	D	D	D	B	A	A	B	A	D	
Sodium Hypochlorite (100%)	D	D	D	D	D	D	D	B	B	-	A	-	B	D	-	-	-	D	C	B	A	A	-	-	-	
Sodium Hyposulfate	D	D	D	A	A	-	-	-	-	-	-	-	-	-	-	-	-	-	C	-	A	-	-	-	-	
Sodium Hyposulfite	D	D	D	D	D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	A	-	-	-	
Sodium Metaphosphate	D	D	D	D	D	B	B	B	A	A	A	A	A	-	-	-	-	A	C	D	A	A	A	A	-	
Sodium Metasilicate	D	A	A	A	A	D	A	B	A	A	A	A	A	-	-	A	A	-	A	A	A	A	A	A	-	B
Sodium Nitrate	B	B	B	B	B	A	C	A	A	A	A	D	B	B	-	A	C	B	B	A	A	A	A	A	A	B
Sodium Nitrate Moten	B	-	D	B	A	D	-	-	-	-	-	-	-	-	-	-	-	D	-	D	D	D	-	D	-	
Sodium Nitrite	A	-	A	A	-	-	A	-	-	A	-	-	A	-	-	-	-	-	D	A	A	A	-	A	-	
Sodium Perborate	D	C	C	B	C	B	C	B	A	A	A	B	B	B	-	B	B	B	B	A	A	A	A	A	A	B
Sodium Peroxide	D	C	D	B	A	D	C	B	B	A	A	B	B	B	-	B	B	D	B	B	A	A	B	A	D	
Sodium Phosphate	D	-	B	B	B	A	B	-	A	-	A	-	A	C	-	A	A	A	B	A	A	A	A	A	A	A
Sodium Phosphate (Dibasic)	D	-	D	A	-	A	-	-	A	-	A	-	-	B	-	A	B	-	B	A	A	A	A	-	A	
Sodium Phosphate (Mono)	D	-	D	A	-	A	-	-	A	-	A	-	-	B	-	A	A	-	C	A	A	A	A	-	A	
Sodium Phosphate (Tribasic)	D	-	D	B	-	A	B	-	A	A	A	B	A	B	-	A	B	B	C	A	A	A	A	A	A	
Sodium Polyphosphate	D	D	D	B	B	B	A	B	A	-	A	A	A	-	-	-	-	A	D	A	A	A	-	-	-	
Sodium Silicate (Water Glass)	C	B	B	A	B	C	A	A	A	A	A	A	B	B	-	A	A	A	A	A	A	A	A	A	A	B
Sodium Sulfate (Salt Cake)	B	B	B	B	B	B	A	A	A	A	A	A	B	B	-	A	A	A	B	A	A	A	A	A	A	A
Sodium Sulfide	D	C	D	B	D	B	A	A	A	A	A	A	B	B	-	A	A	C	A	B	A	A	A	A	A	A
Sodium Sulfide - Saturated	D	-	B	B	-	A	-	-	B	-	B	-	A	B	-	A	A	-	A	A	A	A	A	A	A	A
Sodium Sulfite	D	A	D	D	B	A	A	A	A	A	A	A	B	B	-	A	A	D	A	B	A	A	A	A	A	A
Sodium Tetraborate	C	-	B	A	A	C	A	A	A	B	A	A	B	B	-	A	B	B	B	A	A	A	A	A	A	B
Sodium Tetraphosphate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	-	-	-
Sodium Thiosulfate	D	C	D	B	B	C	B	A	A	A	A	A	B	-	-	-	A	B	A	A	A	A	A	A		

# CHEMICAL COMPATIBILITY FOR DIAPHRAGM PUMPS

CHEMICALS	METALS					PLASTICS, ELASTOMERS & LEATHER																				
	Aluminum	Carbon Steel	Cast/Ductile Iron	304 Stainless Steel	316 Stainless Steel	Acetal	Buna	CSM (Hypalon)	EPR, EPDM	Fluorocarbon	Fluoroelastomer (FKM)	Geolast (Buna & Polypropylene)	Hastelloy C	TPE	Leather	Nitrile (TS)	Nitrile (TPE)	Nylon	Polychloroprene	Polypropylene	PTFE	PVDF	Santoprene (EPDM & Polypropylene)	UHMWPE	Urethane	
A: Excellent, B: Good, C: Fair to Poor, D: Not recommended  - No Data																										
Sodium Thiosulphate	B	-	C	-	A	-	B	-	-	-	A	-	A	-	-	-	-	B	A	A	A	A	-	-	-	-
Sodium Triphosphate	B	-	C	A	-	C	-	-	A	-	A	-	A	B	-	A	-	-	A	A	A	A	A	-	-	A
Sorghum	A	A	A	A	A	A	A	-	A	-	A	A	A	-	-	A	A	A	A	A	A	-	A	A	-	-
Soy Sauce	A	D	D	D	D	A	A	-	A	-	A	-	D	-	-	A	A	A	A	A	A	A	-	A	-	B
Soybean Oil	B	A	A	A	A	B	A	C	D	A	A	A	A	B	-	A	A	B	D	B	A	B	C	A	B	
Spelly, Solvent B,C,E	-	-	-	-	-	-	-	-	D	-	A	-	-	-	-	A	-	-	D	-	A	-	-	-	-	
Spry	-	-	-	-	-	-	-	-	B	-	A	-	-	-	-	A	-	-	B	-	-	-	-	A	A	
SR-10 Fuel	-	-	-	-	-	-	-	-	D	-	A	-	-	-	-	A	-	-	D	-	-	-	-	A	B	
SR-6 Fuel	-	-	-	-	-	-	-	-	D	-	A	-	-	-	-	B	-	-	D	-	-	-	-	A	B	
Stannic Chloride	D	D	D	D	D	C	A	C	A	-	A	-	B	B	-	A	A	D	D	A	A	A	A	A	B	
Stannic Chloride (Tin Chloride)	D	-	C	A	-	-	A	-	B	A	-	A	B	-	-	-	-	B	B	A	A	A	A	-	-	
Stannic Fluoborate	D	D	D	-	A	C	A	-	-	-	A	A	-	-	-	-	-	-	A	-	-	-	-	-	-	
Stannous Chloride	D	A	B	C	A	-	A	A	C	A	A	A	B	C	-	A	A	D	A	A	A	A	B	-	C	
Starch	B	C	D	B	B	B	A	A	B	C	A	A	A	B	A	A	A	A	A	A	A	-	A	A	A	
Steam	-	-	-	-	-	A	D	-	A	-	D	-	-	D	-	-	-	A	C	A	A	A	-	A	-	
Steam 220°F-300°F	A	-	A	-	A	-	D	-	-	-	D	-	-	-	-	-	-	D	D	-	D	-	-	-	-	
Steam To 200°F	A	-	A	-	A	-	C	-	-	-	D	-	-	-	-	-	-	D	C	-	D	-	-	-	-	
Stearic Acid	C	C	C	B	B	C	C	C	B	A	A	B	B	C	-	B	B	A	B	B	A	A	B	A	A	
Stoddard Solvent	A	A	A	A	A	A	B	-	D	-	A	B	D	C	A	A	B	A	D	C	A	D	D	-	A	
Styrene	A	A	B	A	A	A	D	D	D	A	B	D	D	D	-	D	D	B	D	D	A	B	C	A	D	
Sucrose Solution	A	-	B	A	-	A	A	-	A	A	A	-	A	B	-	A	A	A	B	-	A	-	A	A	A	
Sulfuric Acid (98%) (66° Baume)	-	-	-	-	-	-	-	-	-	-	-	D	-	-	-	-	-	-	-	-	-	-	-	-	-	
Sugar (Liquids)	A	-	A	A	A	B	A	A	A	-	A	A	A	B	A	A	A	A	B	A	A	A	A	A	D	
Sulfamic Acid	A	-	-	D	-	D	B	-	-	-	-	-	D	-	-	-	-	D	A	-	A	-	-	-	-	
Sulfate (Liquors)	D	C	C	B	B	D	A	B	A	-	A	-	B	-	-	-	-	B	B	A	A	A	-	-	-	
Sulfate Liquor Black	B	-	C	B	B	D	-	-	A	-	A	-	A	D	-	B	B	C	A	A	A	A	A	A	A	
Sulfate Liquor Green	B	-	C	A	-	D	-	-	A	-	A	-	A	D	-	B	B	B	A	A	A	A	A	A	A	
Sulfate Liquors	B	-	C	-	C	-	-	-	-	-	-	-	A	-	-	-	-	B	C	A	-	A	-	-	-	
Sulfinol	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	A	-	-	-	
Sulfite Liquor	D	-	D	B	B	A	B	-	B	B	A	-	A	-	-	B	B	-	B	B	A	-	A	A	C	
Sulfolane	D	D	D	D	B	-	-	-	-	-	-	-	-	-	-	-	-	A	-	-	A	-	-	-	-	
Sulfur	D	D	D	D	D	A	D	-	D	A	A	-	B	-	-	B	B	A	B	B	A	A	A	A	B	
Sulfur Chloride	D	D	D	D	D	D	D	-	D	A	A	D	B	C	-	D	D	A	D	D	A	A	D	C	C	
Sulfur Dioxide	D	-	D	D	A	D	D	C	B	A	D	D	C	D	-	D	D	C	B	A	A	A	A	A	C	

# CHEMICAL COMPATIBILITY FOR DIAPHRAGM PUMPS

CHEMICALS	METALS					PLASTICS, ELASTOMERS & LEATHER																				
	Aluminum	Carbon Steel	Cast/Ductile Iron	304 Stainless Steel	316 Stainless Steel	Acetal	Buna	CSM (Hypalon)	EPR, EPDM	Fluorocarbon	Fluoroelastomer (FKM)	Geolast (Buna & Polypropylene)	Hastelloy C	TPE	Leather	Nitrile (TS)	Nitrile (TPE)	Nylon	Polychloroprene	Polypropylene	PTFE	PVDF	Santoprene (EPDM & Polypropylene)	UHMWPE	Urethane	
A: Excellent, B: Good, C: Fair to Poor, D: Not recommended  - No Data																										
Sulfur Dioxide (dry)	B	A	A	D	A	B	D	-	A	-	A	-	B	C	-	-	-	B	D	A	A	A	-	-	-	
Sulfur Dioxide Gas Dry	D	-	B	A	A	B	D	-	A	-	A	-	-	D	-	-	-	B	D	C	A	A	-	A	-	
Sulfur Dioxide Gas Wet	-	-	-	-	-	C	D	-	A	-	A	-	-	D	-	-	-	C	B	D	A	A	-	A	-	
Sulfur Hexafluoride	D	-	D	-	-	D	B	B	B	A	C	B	D	B	-	B	C	B	B	-	A	-	B	A	B	
Sulfur Molten	-	-	-	-	-	D	-	-	-	-	-	-	-	-	-	-	-	D	-	D	A	-	-	D	-	
Sulfur Trioxide	D	B	D	B	C	-	D	D	C	A	A	D	B	D	-	D	D	D	D	D	A	D	D	C	C	
Sulfur Trioxide (dry)	A	A	A	D	C	D	D	-	C	-	A	-	B	-	-	-	-	A	D	D	A	D	-	-	-	
Sulfuric Acid - (To 75%)	D	-	D	C	-	D	-	-	C	-	A	-	A	B	-	D	D	-	D	A	A	A	A	-	D	
Sulfuric Acid - 10%	D	-	D	A	-	D	B	-	A	A	A	-	A	D	-	-	-	D	A	A	A	A	A	D	-	
Sulfuric Acid - 25%	D	-	D	B	-	D	C	-	B	A	A	-	A	D	-	-	-	D	B	A	A	A	A	D	-	
Sulfuric Acid - 50%	D	-	D	D	-	D	C	-	B	A	A	-	A	D	-	-	-	D	B	A	A	A	A	D	-	
Sulfuric Acid - 60%	D	-	D	D	-	D	D	-	C	A	A	-	A	D	-	-	-	D	C	A	A	A	A	D	-	
Sulfuric Acid - 75%	D	-	C	C	-	D	D	-	C	A	A	-	A	D	-	-	-	D	D	A	A	A	C	D	-	
Sulfuric Acid - 95%	D	-	B	A	-	D	D	-	C	A	A	-	A	D	-	-	-	D	D	D	A	A	C	D	-	
Sulfuric Acid - Concentrated	-	-	-	-	-	D	D	-	D	-	A	-	-	D	-	-	-	D	D	B	A	A	D	D	-	
Sulfuric Acid (<10%)	D	C	D	D	C	D	D	A	A	-	A	B	B	A	-	D	D	C	D	A	A	A	A	A	D	
Sulfuric Acid (10-75%)	D	D	D	D	D	D	D	B	B	-	A	D	B	-	-	-	-	D	D	A	A	A	-	-	-	
Sulfuric Acid (20% Oleum)	D	-	D	-	-	-	D	-	-	-	B	-	-	-	-	-	-	D	D	D	A	-	-	-	-	
Sulfuric Acid (75-100%)	D	D	D	C	D	-	C	C	B	-	A	-	B	C	-	-	-	D	D	C	A	A	-	-	-	
Sulfuric Acid (cold concentrated)	B	D	D	C	B	-	D	C	C	-	B	-	A	B	-	-	-	D	D	A	A	A	-	-	-	
Sulfuric Acid (Conc.)	-	-	D	B	-	D	D	-	C	A	-	-	B	-	-	-	-	D	D	A	A	A	B	-	-	
Sulfuric Acid (Concentrated To 98%)	D	-	D	-	B	-	D	-	-	-	A	-	-	-	-	-	-	D	D	C	A	A	-	-	-	
Sulfuric Acid (Concentrated)	D	-	D	C	-	D	-	-	C	-	A	-	B	C	-	D	D	-	D	C	A	A	B	-	D	
Sulfuric Acid (Dilute)	D	-	D	-	B	-	D	-	-	-	A	-	-	-	-	-	-	C	C	A	A	A	-	-	-	
Sulfuric Acid (Fuming)	C	-	D	C	-	D	D	-	D	-	A	-	D	D	-	D	D	D	D	D	A	D	D	D	D	
Sulfuric Acid (hot concentrated)	D	D	D	D	C	-	D	D	D	-	A	-	D	-	-	-	-	D	D	D	A	C	-	-	-	
Sulfuric Acid Aerated	-	-	-	-	-	D	-	-	-	-	-	-	-	-	-	-	-	D	-	C	A	D	-	D	-	
Sulfuric Acid Air Free	-	-	-	-	-	D	-	-	-	-	-	-	-	D	-	-	-	D	-	C	A	D	A	D	-	
Sulfuric Acid Boiling	-	-	-	-	-	D	-	-	-	-	-	-	-	-	-	-	-	D	-	D	A	D	-	D	-	
Sulfuric Acid -Dilute	D	-	D	B	-	D	-	-	A	-	A	-	A	A	-	D	D	-	C	A	A	A	A	A	C	
Sulfuric Acid Fuming Oleum	B	D	D	B	B	D	D	-	D	-	A	-	-	D	-	-	-	D	D	D	A	D	-	D	-	
Sulfurous Acid	D	D	D	D	B	D	C	A	B	-	A	A	B	C	-	-	-	D	C	A	A	A	-	A	-	
Sulfurous Acid	B	-	D	B	-	D	B	-	C	A	-	-	B	-	-	-	-	D	D	A	A	A	A	A	-	
Sulfuryl Chloride	-	-	-	-	-	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	-	-	-	-	

# CHEMICAL COMPATIBILITY FOR DIAPHRAGM PUMPS

CHEMICALS	METALS					PLASTICS, ELASTOMERS & LEATHER																				
	Aluminum	Carbon Steel	Cast/Ductile Iron	304 Stainless Steel	316 Stainless Steel	Acetal	Buna	CSM (Hypalon)	EPR, EPDM	Fluorocarbon	Fluoroelastomer (FKM)	Geolast (Buna & Polypropylene)	Hastelloy C	TPE	Leather	Nitrile (TS)	Nitrile (TPE)	Nylon	Polychloroprene	Polypropylene	PTFE	PVDF	Santoprene (EPDM & Polypropylene)	UHMWPE	Urethane	
A: Excellent, B: Good, C: Fair to Poor, D: Not recommended  - No Data																										
Sulphurous Acid	D	-	D	B	-	D	-	-	D	-	D	-	B	D	-	D	D	-	D	A	A	A	-	A	D	
Sunsafe (Fire Resist. Hydr. Fluid)	-	-	-	-	-	-	-	-	D	-	A	-	-	A	-	A	B	-	B	-	A	-	D	-	D	
Syrup	A	-	-	A	A	A	A	-	A	-	A	-	-	-	-	A	A	-	B	A	-	-	A	-	-	
Tall Oil	D	-	C	D	B	A	A	-	D	-	A	-	B	-	-	A	A	-	D	B	A	A	D	A	A	
Tallow	A	-	C	A	A	C	A	C	A	A	A	B	-	-	-	A	B	A	D	B	A	-	B	A	A	
Tannic Acid	D	C	D	B	A	D	C	A	C	A	A	D	B	B	-	A	A	D	B	A	A	B	A	A	A	
Tannin	-	-	-	-	-	A	A	-	-	-	-	-	-	-	-	-	-	A	A	-	A	-	-	-	-	
Tanning Liquors	C	-	-	A	A	D	C	B	B	-	A	B	B	-	-	A	-	A	D	B	A	A	A	A	-	
Tar And Tar Oil	A	A	C	B	A	A	-	-	C	-	A	-	-	C	-	-	-	C	C	A	A	A	-	C	D	
Tar, Bituminous	A	A	B	A	B	A	B	-	D	A	A	-	A	B	-	B	B	C	D	A	A	-	B	-	B	
Tartaric Acid	D	D	D	C	C	D	B	A	C	A	A	A	B	C	-	A	B	B	B	A	A	B	A	A	A	
Terpene Monocyclic	A	-	D	-	-	-	-	-	D	-	A	-	-	-	-	C	-	-	A	-	A	-	-	-	-	
Terpenes C10	A	-	D	-	-	-	C	-	D	A	-	-	-	-	-	-	-	-	D	-	A	-	-	A	-	
Terpineol	A	-	A	A	A	-	C	-	C	A	A	D	A	-	-	B	D	-	D	D	A	B	B	-	B	
Terta Bromoethane	D	-	-	-	-	-	-	-	D	-	A	-	-	-	-	D	D	-	D	D	A	-	D	-	-	
Tertiary Butyl Alcohol	-	-	-	-	-	A	A	-	B	B	B	-	-	B	-	A	-	-	A	B	B	-	D	-	B	
Tertiary Butyl Catechol	C	-	B	B	B	-	D	-	-	A	A	-	-	-	-	-	-	-	B	-	A	-	B	-	-	
Tertiary Butyl Mercaptan	-	-	-	-	-	-	D	-	A	A	A	-	-	D	-	-	B	-	D	B	D	-	B	-	D	
Tetra Bromomethane	D	-	-	-	-	-	D	-	-	A	A	D	-	-	-	-	-	-	D	D	A	-	D	-	-	
Tetra Ethyl Lead	A	-	A	A	A	-	B	-	D	-	A	-	-	-	-	-	-	-	B	D	A	A	-	-	-	
Tetrabutyl Titanate	-	-	-	-	-	-	B	-	B	A	A	-	-	-	-	B	-	-	B	-	A	-	B	-	-	
Tetrachloroacetic Acid	D	-	D	D	D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	B	-	-	-	
Tetrachlorodifluoroethane	-	-	-	-	-	-	-	-	D	-	-	-	-	-	-	B	D	-	D	-	A	-	D	-	-	
Tetrachlorodifluoroethane	-	-	-	-	-	-	D	-	-	-	-	-	-	-	-	-	-	-	D	-	A	-	-	-	-	
Tetrachloroethane	D	A	B	C	A	A	D	D	D	A	A	D	A	-	-	-	-	C	D	D	A	A	D	-	-	
Tetrachloroethylene	D	A	A	A	B	A	D	D	D	-	A	D	-	-	-	D	D	D	D	D	A	A	D	B	D	
Tetraethyl Lead	B	-	A	A	-	-	B	-	D	B	A	-	-	B	-	B	B	-	D	A	A	A	C	C	B	
Tetraethylene Glycol	-	-	-	-	-	-	A	-	-	A	A	-	-	-	-	A	-	-	-	-	A	-	-	-	-	
Tetrahydrofuran	D	-	A	A	A	A	D	D	D	D	D	D	A	C	-	D	D	A	D	C	A	C	D	B	D	
Tetrahydronaphthalene	A	-	A	A	-	-	D	-	D	A	-	-	A	-	-	-	-	A	D	D	A	-	-	D	-	
Tetralin	A	-	A	A	A	-	D	-	D	-	A	-	A	-	-	D	D	-	D	D	A	-	C	-	D	
Tetraphosphoric Acid	D	-	D	B	B	D	-	-	-	-	-	-	-	-	-	-	-	B	-	-	A	A	-	-	-	
Thiokol TP-90B	-	-	-	-	-	-	-	-	A	-	A	-	-	-	-	D	-	-	B	-	-	-	-	-	-	
Thionyl Chloride	D	-	D	D	D	B	D	-	D	B	B	D	A	-	-	-	-	D	D	D	A	D	B	D		

# CHEMICAL COMPATIBILITY FOR DIAPHRAGM PUMPS

CHEMICALS	METALS					PLASTICS, ELASTOMERS & LEATHER																				
	Aluminum	Carbon Steel	Cast/Ductile Iron	304 Stainless Steel	316 Stainless Steel	Acetal	Buna	CSM (Hypalon)	EPR, EPDM	Fluorocarbon	Fluoroelastomer (FKM)	Geolast (Buna & Polypropylene)	Hastelloy C	TPE	Leather	Nitrile (TS)	Nitrile (TPE)	Nylon	Polychloroprene	Polypropylene	PTFE	PVDF	Santoprene (EPDM & Polypropylene)	UHMWPE	Urethane	
A: Excellent, B: Good, C: Fair to Poor, D: Not recommended  - No Data																										
Thiophene	-	-	-	-	-	-	D	-	D	C	C	-	-	-	-	D	D	-	D	-	A	-	D	-	-	
Tin Molten	D	-	-	C	C	D	D	-	D	-	D	-	-	-	D	-	-	D	D	D	D	D	D	-	D	-
Tin Salts	D	-	-	-	D	-	A	A	B	-	A	A	C	-	-	-	-	-	-	A	A	A	-	-	-	
Tin Tetrachloride	D	-	D	D	D	-	-	-	-	-	-	-	A	-	-	A	A	D	D	A	A	A	-	-	B	
Titanium Tetrachloride	D	-	B	B	B	-	C	-	D	A	A	D	B	-	-	B	C	A	D	D	A	B	D	C	D	
Toluene	A	-	A	-	A	-	C	-	-	-	A	-	A	-	-	-	-	A	D	D	A	A	-	-	-	
Toluene (Toluol)	A	A	A	A	A	C	D	D	D	B	C	D	A	C	-	D	C	A	D	D	A	A	D	D	D	
Toluene At 70°	A	-	A	A	A	C	D	-	D	-	A	-	-	C	-	-	-	A	D	D	A	B	D	CA	-	
Toluene Diisocyanate	-	-	-	-	-	C	-	-	A	-	C	B	-	B	-	D	-	-	D	-	A	-	B	-	-	
Toluene, Toluol	A	-	A	-	A	-	D	-	-	-	A	-	-	-	-	-	-	A	D	B	A	A	-	-	-	
Toluidine	A	-	A	A	-	-	D	-	-	B	B	D	A	-	-	D	-	-	-	-	A	-	-	-	-	
Tomato Juice	A	-	D	A	A	B	A	-	A	-	A	A	-	-	-	-	-	A	A	A	A	A	-	A	-	
Tomato Pulp & Juice	B	-	-	A	A	B	A	-	A	-	A	-	A	-	-	A	A	B	A	A	A	A	A	A	A	
Toothpaste	-	-	D	A	-	-	A	-	-	A	-	-	A	-	-	-	-	-	C	-	A	-	-	-	-	
TP-95	-	-	-	-	-	-	-	-	A	-	A	-	-	-	-	D	-	-	B	-	-	-	-	-	-	
Transformer Oil	A	-	B	A	A	C	B	-	D	A	A	B	A	-	-	A	B	A	C	D	A	A	D	A	A	
Transmission Fluid (Type A)	A	A	A	A	A	A	A	-	D	A	A	A	A	B	-	A	-	-	C	-	A	-	C	-	A	
Triacetin	B	-	-	-	-	-	A	-	A	D	D	A	-	-	-	B	-	-	B	-	A	-	A	-	D	
Triaryl Phosphate	-	-	-	-	-	-	D	-	A	A	A	-	-	-	-	D	D	A	D	B	A	A	-	A	D	
Tributoxy Ethyl Phosphate	-	-	-	-	-	-	D	-	-	-	B	-	-	-	-	-	-	-	D	-	A	-	-	-	-	
Tributoxyl Ethyl Phosphate	-	-	-	-	-	-	-	-	A	-	A	-	-	-	-	D	-	-	D	-	A	-	B	A	D	
Tributyl Citrate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	C	A	-	-	-	-	
Tributyl Mercaptan	-	-	-	-	-	-	D	-	D	-	A	-	-	-	-	D	-	-	D	-	A	-	B	A	-	
Tributyl Phosphate	A	-	B	A	A	-	D	-	C	D	D	D	-	C	-	D	D	B	D	D	A	A	B	D	D	
Tributyoxyl Ethyl Phosphate	-	-	-	-	-	-	D	-	A	B	-	-	-	-	-	-	-	-	D	-	A	-	B	-	-	
Trichloroacetic Acid	D	-	D	D	-	D	-	-	B	-	D	-	B	D	-	D	D	-	D	B	A	A	B	-	D	
Trichlorethylene	D	-	C	-	A	-	D	-	-	-	A	-	A	-	-	-	-	A	D	B	A	A	-	-	-	
Trichloroacetic Acid	D	D	D	D	D	-	C	-	C	B	C	D	B	D	-	-	-	D	D	B	A	B	B	C	-	
Trichlorobenzenes	D	-	A	A	-	-	D	-	-	B	A	D	B	-	-	D	-	-	D	-	A	-	-	-	D	
Trichloroethane	D	B	B	B	B	A	D	D	D	B	A	D	A	D	-	D	D	D	D	D	A	B	D	D	D	
Trichloroethylene	D	C	C	B	B	D	D	D	D	C	A	D	A	D	-	-	-	D	D	D	A	D	D	CA	-	
Trichloroethylene (Triad)	B	-	B	B	-	B	-	-	D	-	C	-	B	D	-	D	D	-	D	C	A	A	D	-	D	
Trichloromonofluoroethane (Freon 17)	A	-	-	A	A	-	-	-	-	-	-	-	A	-	-	D	D	A	D	-	A	-	-	-	-	
Trichloropropane	D	A	A	A	A	A	D	-	-	B	A	D	A	-	-	A	D	-	A	D	A	-	D	-	A	



# CHEMICAL COMPATIBILITY FOR DIAPHRAGM PUMPS

CHEMICALS	METALS					PLASTICS, ELASTOMERS & LEATHER																				
	Aluminum	Carbon Steel	Cast/Ductile Iron	304 Stainless Steel	316 Stainless Steel	Acetal	Buna	CSM (Hypalon)	EPR, EPDM	Fluorocarbon	Fluoroelastomer (FKM)	Geolast (Buna & Polypropylene)	Hastelloy C	TPE	Leather	Nitrile (TS)	Nitrile (TPE)	Nylon	Polychloroprene	Polypropylene	PTFE	PVDF	Santoprene (EPDM & Polypropylene)	UHMWPE	Urethane	
A: Excellent, B: Good, C: Fair to Poor, D: Not recommended  - No Data																										
Trichlorotrifluoroethane (Freon 113)	A	-	D	A	A	-	-	-	D	-	A	-	A	A	-	A	A	A	A	A	A	A	A	D	-	B
Tricresyl Alcohol (Tridecanol)	-	-	-	-	-	-	A	-	-	B	-	-	-	-	-	-	-	-	-	-	A	-	-	-	-	
Tricresyl Phosphate	D	-	A	B	B	C	D	-	A	C	A	-	A	C	-	D	D	A	C	B	A	D	B	A	D	
Tricresylphosphate	D	B	B	B	B	C	D	D	A	-	B	D	A	-	-	-	-	A	D	B	A	D	-	-	-	
Tridecyl Alcohol (Tridecanol)	-	-	-	-	-	-	-	-	-	-	B	-	-	-	-	A	-	-	-	-	A	-	-	-	B	
Triethanol Amine	B	-	A	A	A	B	D	-	B	C	D	D	A	C	-	C	D	A	B	A	A	D	A	A	D	
Triethanolamine	B	-	A	A	A	B	B	-	A	-	D	-	-	D	-	-	-	A	A	D	A	D	-	A	-	
Triethyl Aluminum	-	-	-	-	-	-	D	-	-	B	B	-	-	D	-	D	-	-	D	-	A	-	B	-	-	
Triethyl Amine	-	-	A	A	-	A	A	-	A	-	A	-	A	-	-	A	D	-	B	C	A	A	D	-	D	
Triethyl Borane	-	-	-	-	-	-	D	-	-	A	A	-	-	-	-	D	-	-	D	-	A	-	B	-	-	
Triethyl Phosphate	A	-	A	A	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	D	-	-	-	
Triethylamine	-	A	A	A	A	D	C	-	A	-	D	A	-	-	-	-	-	A	B	D	A	B	-	-	-	
Triethylene Glycol	-	-	-	-	-	-	A	-	-	A	A	-	-	-	-	A	A	A	-	A	A	-	-	A	-	
Trifluoroethane	-	-	-	-	-	-	-	-	D	-	A	-	-	-	-	D	-	-	D	-	A	-	-	-	D	
Trimethylene Glycol	A	-	A	A	-	-	A	-	A	A	A	A	A	-	-	A	-	-	-	-	A	-	-	-	-	
Trinitrotoluene (TNT)	-	-	-	-	-	-	D	-	D	C	C	-	-	-	-	D	-	-	B	-	A	-	A	-	-	
Trioctyl Phosphate	-	-	-	-	-	-	D	-	A	B	B	-	-	-	-	D	-	-	D	-	A	-	B	-	D	
Triphenyl Phosphate	-	-	-	-	-	-	-	-	-	-	C	-	-	-	-	D	D	-	-	-	A	-	-	-	-	
Triphenyl Phosphite	A	-	C	A	A	-	-	-	-	-	-	-	-	-	-	-	-	A	-	-	A	-	-	-	-	
Tripropylene Glycol	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	A	-	-	B	-	
Trisodium Phosphate	D	-	A	B	B	D	A	-	A	-	A	A	A	A	-	A	A	B	A	A	A	A	A	A	B	
Tung Oil	A	A	B	A	B	A	A	-	D	-	B	A	A	B	-	A	D	-	B	A	A	A	B	A	C	
Turbine Oil	A	A	A	A	A	A	B	D	D	-	A	B	-	-	-	B	-	A	D	B	A	A	-	-	A	
Turbine Oil #15 (Mil-L-7808A)	-	-	-	-	-	-	-	-	D	-	A	-	-	-	-	B	-	-	D	-	A	-	-	-	D	
Turbo Oil #35	-	-	-	-	-	-	-	-	D	-	A	-	-	-	-	A	-	-	B	-	-	-	-	-	A	
Turpentine	A	-	B	A	A	A	A	D	D	A	A	A	B	B	-	A	B	B	D	D	A	A	D	D	D	
Type 1 Fuel (Mil-S-3136)	-	-	-	-	-	-	-	-	D	-	A	-	-	A	-	A	-	-	A	-	A	-	D	-	B	
Type 11 Fuel (Mil-S-3136)	-	-	-	-	-	-	-	-	D	-	A	-	-	-	-	B	-	-	D	-	A	-	D	-	B	
Type 111 (Fuel Mil-S-3136)	-	-	-	-	-	-	-	-	D	-	A	-	-	A	-	B	-	-	D	-	A	-	D	-	B	
Undecyl Alcohol	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	B	A	-	-	-	-	
Univis 40 (Hydr. Fluid)	-	-	-	-	-	-	-	-	D	-	A	-	-	-	-	A	-	-	B	-	A	-	D	-	A	
Univolt #35 (Mineral Oil)	-	-	-	-	-	-	-	-	D	-	A	-	-	-	-	A	-	-	B	-	A	-	C	-	A	
Unleaded Gasoline	A	-	A	-	A	-	D	-	-	-	A	-	A	-	-	-	-	A	D	D	A	C	-	-	-	
Unsymmetrical Dimethyl Hydrazine	B	-	A	A	-	-	C	-	A	D	D	-	-	-	-	B	-	-	C	-	A	A	B	-	D	



# CHEMICAL COMPATIBILITY FOR DIAPHRAGM PUMPS

CHEMICALS	METALS					PLASTICS, ELASTOMERS & LEATHER																				
	Aluminum	Carbon Steel	Cast/Ductile Iron	304 Stainless Steel	316 Stainless Steel	Acetal	Buna	CSM (Hypalon)	EPR, EPDM	Fluorocarbon	Fluoroelastomer (FKM)	Geolast (Buna & Polypropylene)	Hastelloy C	TPE	Leather	Nitrile (TS)	Nitrile (TPE)	Nylon	Polychloroprene	Polypropylene	PTFE	PVDF	Santoprene (EPDM & Polypropylene)	UHMWPE	Urethane	
A: Excellent, B: Good, C: Fair to Poor, D: Not recommended  - No Data																										
White Pine Oil	-	-	-	A	-	A	B	-	D	A	A	-	A	D	-	B	-	-	D	-	A	-	C	A	A	
White Spirit	-	-	-	-	A	A	-	-	-	-	-	-	-	A	-	-	-	A	-	A	A	A	D	C	-	
White Sulfate Liquor	B	-	C	A	-	-	B	-	A	B	-	-	B	-	-	-	-	-	A	A	A	A	-	-	-	
White Water (Paper Mill)	-	A	A	A	A	B	-	-	-	-	A	-	-	-	-	-	-	A	A	A	-	-	-	-	-	
Wine	C	-	D	A	A	B	A	-	A	B	-	-	A	B	-	-	-	B	A	A	A	A	A	A	-	
Wolmar Salt	-	-	-	-	-	-	-	-	A	-	A	-	-	-	-	A	-	-	B	-	A	-	-	-	A	
Wood Alcohol	-	-	-	-	-	-	-	-	A	-	D	-	-	-	-	A	-	-	A	-	A	-	-	A	D	
Wood Oil	A	-	A	A	-	-	-	-	D	-	A	-	-	A	-	A	-	-	B	-	A	-	-	A	C	
Wood Pulp	C	-	C	A	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	-	-	-	-	
Wort, Distillery	A	-	B	A	-	-	-	-	A	A	A	-	A	-	-	A	-	-	B	-	A	-	-	-	B	
Xylene	B	B	B	B	B	B	D	D	D	A	B	D	A	C	-	D	C	A	D	D	A	A	D	D	D	
Xylidines (Xylidin)	B	-	B	-	-	-	-	-	D	D	-	-	-	-	-	-	-	-	D	-	A	-	C	-	-	
Zeolite	-	-	-	A	-	-	C	-	A	A	A	-	A	-	-	C	-	-	C	-	A	-	A	-	-	
Zinc Acetate	C	-	-	A	-	-	C	-	A	D	B	A	-	-	-	B	B	-	B	A	A	A	A	A	D	
Zinc Carbonate	B	-	B	B	B	-	A	-	A	A	A	A	B	-	-	A	A	-	A	-	A	-	A	A	A	
Zinc Chloride	D	D	D	D	D	D	B	A	A	A	A	A	B	B	-	A	A	C	B	A	A	A	A	A	A	
Zinc Cyanide	-	-	-	A	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	A	-	-	-	-	
Zinc Hydrosulfite	D	D	D	A	A	C	A	-	A	A	-	A	-	-	-	A	A	A	A	-	A	A	A	-	-	
Zinc Molten	D	-	D	D	D	D	-	-	-	-	-	-	-	-	-	-	-	D	-	D	D	D	-	D	-	
Zinc Nitrate	-	-	-	A	A	-	-	-	-	-	-	-	-	-	-	-	-	A	-	A	A	A	-	-	-	
Zinc Salts	-	-	-	-	-	-	-	-	A	-	A	-	-	-	-	A	A	-	A	A	A	A	A	-	A	
Zinc Stearate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	A	-	-	-	-	
Zinc Sulfate	D	D	D	B	A	C	A	A	A	B	A	A	B	D	-	A	A	C	A	A	A	A	A	A	A	