Chemicals: Castor Oil - Copper Chloride

(A) **Excellent** = Recommended (B) **Good** = Recommended (C) **Fair** (limited life) (X) **Not Recommended**

*Special Viton FPM-C required. Consult Chemline.

Chemical	Concentration (%)	Temp. °C	Temp. °F	PVC	CPVC	PP	PVDF	TEFLON	VITON	EPDM	NITRILE
Castor Oil	Pure	20	68	A	A	A	A	A	A	A	A
		40	104	A	A	A	A	A	A	A	A
		60	140	A	A	A	A	A	A	A	A
		80	176		A	A	A	A			
		100	212				A	A			
		120	248				A	A			
Chloric Acid $HClO_3$	20	20	68	A		X	A	A	A	A	C
		40	104	A			A	A		A	
		60	140	B			A	A			
		80	176				A	A			
		100	212								
		120	248								
Chlorine Dioxide ClO_2	8 gm/li	20	68	A	A	C	A	A	A		
		40	104	A	B	X	A	A			
		60	140	B	B		A	A			
		80	176				A	A			
		100	212				A	A			
		120	248					A			
Chlorine Dioxide ClO_2	14 gm/li	20	68	A	A	C	A	A	A*		
		40	104	A	B	X	A	A			
		60	140	B	B		A	A			
		80	176					A			
		100	212					A			
		120	248					A			
Chlorine Gas Cl_2	** Wet	20	68	A	A	X	A	A	X	X	X
		40	104	A	B		A	A			
		60	140	B	C		A	A			
		80	176				A	A			
		100	212				A	A			
		120	248				A	A			
Chlorine Gas (up to 150 ppm moisture) Cl_2	Dry	20	68	A	A	X	A	A	B	B	X
		40	104	A	A		A	A	C	X	
		60	140	A	A		A	A	X		
		80	176				A	A			
		100	212				A	A			
		120	248				A	A			
Chlorine Solution (Chlorinated Water)	400 ppm	20	68	A	A	C	A	A	C	B	X
		40	104	A	B	X	A	A	X	C	
		60	140	B	B		A	A			
		80	176				A	A			
		100	212				A	A			
		120	248				A	A			
Chlorine Solution (Chlorinated Water)	3000 ppm	20	68	A	A	X	A	A			X
		40	104	A	A		A	A			
		60	140								
		80	176								
		100	212								
		120	248								
Chlorobenzene (Monochloro-benzene) C_6H_5Cl	Pure	20	68	X	X	B	A	A	B	X	X
		40	104			C	A	A			
		60	140				A	A			
		80	176				B	A			
		100	212				B	A			
		120	248								
Chloroform (Trichloro-methane) $CHCl_3$	Pure	20	68	X	X	C	A	A	B	X	X
		40	104			X	A	A			
		60	140				B	A			
		80	176				C	A			
		100	212				X	A			
		120	248								
Chloro-sulfonic Acid HSO_3Cl	Pure	20	68	X	X	X	C	A	X	X	X
		40	104				X	A			
		60	140					A			
		80	176					A			
		100	212								
		120	248								

Chemical	Concentration (%)	Temp. °C	Temp. °F	PVC	CPVC	PP	PVDF	TEFLON	VITON	EPDM	NITRILE
Chromic Acid Anhydride CrO_3	10	20	68	A	A	X	A	A	A	B	X
		40	104	A	A		A	A	B	C	
		60	140	A	B		A	A	B	X	
		80	176		C		A	A	B		
		100	212				A	A	X		
		120	248								
Chromic Acid Anhydride CrO_3	20	20	68	A	A	X	A	A	B	B	X
		40	104	A	B		A	A	B	X	
		60	140	B	C		A	A	B		
		80	176				A	A	C		
		100	212				A	A	X		
		120	248								
Chromic Acid Anhydride CrO_3	30	20	68	C	C	X	A	A	X	X	X
		40	104	X	X		A	A			
		60	140				A	A			
		80	176				B	A			
		100	212				C	A			
		120	248								
Chromic Acid Anhydride CrO_3	50	20	68	C	C	X	A	A	X	X	X
		40	104	X	X		A	A			
		60	140				A	A			
		80	176				B	A			
		100	212					A			
		120	248								
Chromic Potassium Alum $KCr(SO_4)_2$	Satu	20	68	A	A	A	A	A	A	A	A
		40	104	A	A	A	A	A	A	A	A
		60	140	A	A	A	A	A	A	A	A
		80	176			A	A	A	A	B	B
		100	212				A	A	A		
		120	248				B				
Citric Acid CH_2COOH | CH_2COOH | CH_2COOH	10	20	68	A	A	A	A	A	A	A	A
		40	104	A	A	A	A	A	A	A	A
		60	140	B	B	A	A	A	A	A	A
		80	176		B	A	A	A	A	A	A
		100	212				A	A	A		
		120	248								
Coconut Oil		20	68	A	A	A	A	A	A	B	A
		40	104	A	A	A	A	A	A	B	A
		60	140	A	A	A	A	A	A		
		80	176		A	A	A	A			
		100	212				A	A			
		120	248				A	A			
Copper Acetate $Cu(CH_3COO)_2$	Satu	20	68	A	A	A	A	A	A	A	A
		40	104				A	A	A	A	
		60	140				A	A	A		
		80	176				A	A			
		100	212				A	A			
		120	248					A			
Copper Borofluoride $Cu(BF_4)_2$		20	68	A	A	A	A	A	A	A	A
		40	104				A	A		A	
		60	140				A	A		A	
		80	176				A	A		A	
		100	212				A	A			
		120	248				A	A			
Copper Carbonate Cu_2CO_3	Satu	20	68	A	A	A	A	A	A	A	A
		40	104	A			A	A			
		60	140				A	A			
		80	176				A	A			
		100	212				A	A			
		120	248				A	A			
Copper Chloride $CuCl_2$	Satu	20	68	A	A	A	A	A	A	A	A
		40	104	A	A	A	A	A	A	A	A
		60	140	A	A	A	A	A	A	A	A
		80	176		A	A	A	A	A	A	A
		100	212				A	A	A		
		120	248				A	A			

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DV Series and Type 14 Diaphragm Valves with PVDF Gas Barriers are always recommended for **Wet Chlorine gas. PVC or CPVC material bodies are recommended for maximum 21 psi services. Consult Chemline on all chlorine gas applications