

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. | | PVC | CPVC | PP | PVDF | TEFLON | VITON | EPDM | NITRILE | Chemical | Concentration (%) | Temp. | | PVC | CPVC | PP | PVDF | TEFLON | VITON | EPDM | NITRILE |
|--|-------------------|-------|-----|-----|------|----|------|--------|-------|------|---------|---|-------------------|-------|-----|-----|------|----|------|--------|-------|------|---------|
| | | °C | °F | | | | | | | | | | | °C | °F | | | | | | | | |
| Castor Oil | Pure | 20 | 68 | A | A | A | A | A | A | A | A | Chromic Acid Anhydride CrO ₃ | 10 | 20 | 68 | A | A | X | A | A | A | B | X |
| | | 40 | 104 | A | A | A | A | A | A | A | A | | | 40 | 104 | A | A | | A | A | B | C | |
| | | 60 | 140 | A | A | A | A | A | A | A | A | | | 60 | 140 | A | B | | A | A | B | X | |
| | | 80 | 176 | | A | A | A | A | | | | | | 80 | 176 | | C | | A | A | B | | |
| | | 100 | 212 | | | | A | A | | | | | | 100 | 212 | | | | A | A | X | | |
| | | 120 | 248 | | | | A | A | | | | | | 120 | 248 | | | | | | | | |
| Chloric Acid HClO ₃ | 20 | 20 | 68 | A | | X | A | A | A | A | C | 20 | 20 | 68 | A | A | X | A | A | B | B | X | |
| | | 40 | 104 | A | | | A | A | | A | | | 40 | 104 | A | B | | A | A | B | X | | |
| | | 60 | 140 | B | | | A | A | | | | | 60 | 140 | B | C | | A | A | B | | | |
| | | 80 | 176 | | | | A | A | | | | | 80 | 176 | | | | A | A | C | | | |
| | | 100 | 212 | | | | | | | | | | 100 | 212 | | | | A | A | X | | | |
| | | 120 | 248 | | | | | | | | | | 120 | 248 | | | | | | | | | |
| Chlorine Dioxide ClO ₂ | 8 gm/li | 20 | 68 | A | A | C | A | A | A | | | 30 | 20 | 68 | C | C | X | A | A | X | X | X | |
| | | 40 | 104 | A | B | X | A | A | | | | | 40 | 104 | X | X | | A | A | | | | |
| | | 60 | 140 | B | B | | A | A | | | | | 60 | 140 | | | | A | A | | | | |
| | | 80 | 176 | | | | A | A | | | | | 80 | 176 | | | | B | A | | | | |
| | | 100 | 212 | | | | A | A | | | | | 100 | 212 | | | | C | A | | | | |
| | | 120 | 248 | | | | | A | | | | | 120 | 248 | | | | | | | | | |
| Chlorine Dioxide ClO ₂ | 14 gm/li | 20 | 68 | A | A | C | A | A | A* | | | 50 | 20 | 68 | C | C | X | A | A | X | X | X | |
| | | 40 | 104 | A | B | X | A | A | | | | | 40 | 104 | X | X | | A | A | | | | |
| | | 60 | 140 | B | B | | A | A | | | | | 60 | 140 | | | | A | A | | | | |
| | | 80 | 176 | | | | A | A | | | | | 80 | 176 | | | | B | A | | | | |
| | | 100 | 212 | | | | | A | | | | | 100 | 212 | | | | | A | | | | |
| | | 120 | 248 | | | | | A | | | | | 120 | 248 | | | | | | | | | |
| Chlorine Gas Cl ₂ | ** Wet | 20 | 68 | A | A | X | A | A | X | X | X | Satu | 20 | 68 | A | A | A | A | A | A | A | A | |
| | | 40 | 104 | A | B | | A | A | | | | | 40 | 104 | A | A | A | A | A | A | A | A | |
| | | 60 | 140 | B | C | | A | A | | | | | 60 | 140 | A | A | A | A | A | A | A | A | |
| | | 80 | 176 | | | | A | A | | | | | 80 | 176 | | | A | A | A | A | B | B | |
| | | 100 | 212 | | | | A | A | | | | | 100 | 212 | | | | A | A | A | | | |
| | | 120 | 248 | | | | A | A | | | | | 120 | 248 | | | | B | | | | | |
| Chlorine Gas (up to 150 ppm moisture) Cl ₂ | Dry | 20 | 68 | A | A | X | A | A | B | B | X | 10 | 20 | 68 | A | A | A | A | A | A | A | A | |
| | | 40 | 104 | A | A | | A | A | C | X | | | 40 | 104 | A | A | A | A | A | A | A | A | |
| | | 60 | 140 | A | A | | A | A | X | | | | 60 | 140 | B | B | A | A | A | A | A | A | |
| | | 80 | 176 | | | | A | A | | | | | 80 | 176 | | B | A | A | A | A | A | A | |
| | | 100 | 212 | | | | A | A | | | | | 100 | 212 | | | | A | A | A | | | |
| | | 120 | 248 | | | | A | A | | | | | 120 | 248 | | | | | | | | | |
| Chlorine Solution (Chlorinated Water) | 400 ppm | 20 | 68 | A | A | C | A | A | C | B | X | Coconut Oil | 20 | 68 | A | A | A | A | A | A | B | A | |
| | | 40 | 104 | A | B | X | A | A | X | C | | | 40 | 104 | A | A | A | A | A | A | B | A | |
| | | 60 | 140 | B | B | | A | A | | | | | 60 | 140 | A | A | A | A | A | A | | | |
| | | 80 | 176 | | | | A | A | | | | | 80 | 176 | | A | A | A | A | | | | |
| | | 100 | 212 | | | | A | A | | | | | 100 | 212 | | | | A | A | | | | |
| | | 120 | 248 | | | | A | A | | | | | 120 | 248 | | | | A | A | | | | |
| Chlorine Solution (Chlorinated Water) | 3000 ppm | 20 | 68 | A | A | X | A | A | | | X | Copper Acetate Cu(CH ₃ COO) ₂ | 20 | 68 | A | A | A | A | A | A | A | A | |
| | | 40 | 104 | A | A | | A | A | | | | | 40 | 104 | | | | A | A | A | A | | |
| | | 60 | 140 | | | | A | A | | | | | 60 | 140 | | | | A | A | A | | | |
| | | 80 | 176 | | | | | | | | | | 80 | 176 | | | | A | A | | | | |
| | | 100 | 212 | | | | | | | | | | 100 | 212 | | | | A | A | | | | |
| | | 120 | 248 | | | | | | | | | | 120 | 248 | | | | | A | | | | |
| Chlorobenzene (Monochlorobenzene) C ₆ H ₅ Cl | Pure | 20 | 68 | X | X | | A | A | B | X | X | Copper Borofluoride Cu(BF ₄) ₂ | 20 | 68 | A | A | A | A | A | A | A | A | |
| | | 40 | 104 | | | C | A | A | | | | | 40 | 104 | | | | A | A | A | A | | |
| | | 60 | 140 | | | | A | A | | | | | 60 | 140 | | | | A | A | A | | | |
| | | 80 | 176 | | | | B | A | | | | | 80 | 176 | | | | A | A | A | | | |
| | | 100 | 212 | | | | B | A | | | | | 100 | 212 | | | | A | A | | | | |
| | | 120 | 248 | | | | | | | | | | 120 | 248 | | | | A | A | | | | |
| Chloroform (Trichloromethane) CHCl ₃ | Pure | 20 | 68 | X | X | C | A | A | B | X | X | Copper Carbonate Cu ₂ CO ₃ | 20 | 68 | A | A | A | A | A | A | A | A | |
| | | 40 | 104 | | | X | A | A | | | | | 40 | 104 | A | | | A | A | | | | |
| | | 60 | 140 | | | | B | A | | | | | 60 | 140 | | | | A | A | | | | |
| | | 80 | 176 | | | | C | A | | | | | 80 | 176 | | | | A | A | | | | |
| | | 100 | 212 | | | | X | A | | | | | 100 | 212 | | | | A | A | | | | |
| | | 120 | 248 | | | | | | | | | | 120 | 248 | | | | A | A | | | | |
| Chloro-sulfonic Acid HSO ₃ Cl | Pure | 20 | 68 | X | X | X | C | A | X | X | X | Copper Chloride CuCl ₂ | 20 | 68 | A | A | A | A | A | A | A | A | |
| | | 40 | 104 | | | | X | A | | | | | 40 | 104 | A | A | A | A | A | A | A | A | |
| | | 60 | 140 | | | | | A | | | | | 60 | 140 | A | A | A | A | A | A | A | A | |
| | | 80 | 176 | | | | | A | | | | | 80 | 176 | | A | A | A | A | A | A | A | |
| | | 100 | 212 | | | | | | | | | | 100 | 212 | | | | A | A | A | | | |
| | | 120 | 248 | | | | | | | | | | 120 | 248 | | | | A | A | | | | |

**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.