

Yodock® Barricade Cold-Weather Environment Recommendations

The charts below were designed to provide you with information for using common antifreeze agents to prevent the water in your water-filled barricades from freezing during cold weather operations.

Chart 1 shows the appropriate amount of antifreeze agent (by pound) that is needed for each individual, fully-filled, barricade section. **Chart 2** shows the appropriate amount of material required if you wish to premix your antifreeze agent in bulk. In an effort to accommodate multiple environments, five levels of freeze-point protection have been given; 20°, 10°, 0°, -10° and -20°.

| Chart 1 Antifreeze Chemicals - Mix per Barricade Section | | | | | | | | | | | | | | | | |
|--|---------------------------------|-------|-------|------|--------|--------|-------|-------|------|--------|--------|--------|-------|------|--------|--------|
| Yodock Barricade Model | | 2001 | | | | | 2001M | | | | | 2001MB | | | | |
| Freezepoint Protection | | 20° F | 10° F | 0° F | -10° F | -20° F | 20° F | 10° F | 0° F | -10° F | -20° F | 20° F | 10° F | 0° F | -10° F | -20° F |
| Dry Material - in Lbs. | Calcium Chloride (CaC12) | 140 | 209 | 251 | 307 | 335 | 66 | 99 | 119 | 145 | 159 | 81 | 122 | 146 | 178 | 195 |
| | Calcium Magnesium Acetate (CMA) | 223 | 307 | 377 | 307 | 461 | 106 | 145 | 178 | 205 | 218 | 130 | 178 | 219 | 251 | 268 |
| | Magnesium Chloride (MgC12) | 126 | 181 | 223 | 251 | 279 | 59 | 86 | 106 | 205 | 218 | 73 | 105 | 130 | 146 | 162 |
| | Potassium Acetate (Kac) | 126 | 279 | 349 | 419 | 475 | 59 | 132 | 165 | 198 | 225 | 73 | 162 | 203 | 243 | 276 |
| | Sodium Chloride (NaC12) | 140 | 168 | 293 | N/A | N/A | 66 | 79 | 17 | N/A | N/A | 81 | 97 | 170 | N/A | N/A |
| Liquid Material- in Gallons | | | | | | | | | | | | | | | | |
| | Ethelyne or Propylene Glycol | 28 | 41 | 55 | 65 | 74 | 14 | 20 | 26 | 31 | 35 | 17 | 25 | 32 | 38 | 43 |

| Chart 1 Antifreeze Chemicals - Mix per Barricade Section | | | | | | | | | | | | | | | | |
|--|---------------------------------|--------|-------|------|--------|--------|-------|-------|------|--------|--------|----------|-------|------|--------|--------|
| Yodock Barricade Model | | 2001SL | | | | | APC | | | | | Aerocade | | | | |
| Freezepoint Protection | | 20° F | 10° F | 0° F | -10° F | -20° F | 20° F | 10° F | 0° F | -10° F | -20° F | 20° F | 10° F | 0° F | -10° F | -20° F |
| Dry Material - in Lbs. | Calcium Chloride (CaC12) | 29 | 44 | 53 | 64 | 70 | 11 | 17 | 20 | 25 | 27 | 19 | 28 | 33 | 41 | 44 |
| | Calcium Magnesium Acetate (CMA) | 47 | 64 | 79 | 91 | 96 | 18 | 25 | 30 | 35 | 37 | 30 | 41 | 50 | 57 | 61 |
| | Magnesium Chloride (MgC12) | 26 | 38 | 47 | 53 | 58 | 10 | 14 | 18 | 20 | 22 | 17 | 24 | 30 | 33 | 37 |
| | Potassium Acetate (Kac) | 26 | 58 | 73 | 89 | 99 | 10 | 22 | 28 | 33 | 38 | 17 | 37 | 46 | 56 | 63 |
| | Sodium Chloride (NaC12) | 29 | 35 | 61 | N/A | N/A | 11 | 13 | 23 | N/A | N/A | 19 | 22 | 39 | N/A | N/A |
| Liquid Material- in Gallons | | | | | | | | | | | | | | | | |
| | Ethelyne or Propylene Glycol | 6 | 9 | 11 | 14 | 15 | 2 | 2 | 4 | 5 | 6 | 4 | 6 | 7 | 8 | 10 |

To determine the amount of anti-icing agent required for each full barricade section:

1. Locate your barricade model on **Chart 1**.
2. Choose the level of freeze-point protection required.
3. Locate your chosen antifreeze agent.
4. Use the amount of antifreeze agent listed.

Refer to **Chart 2** if you wish to premix your antifreeze agent in bulk.

| Chart 2 Antifreeze Chemicals - Bulk Mix | | | | | | |
|---|---------------------------------|-------|-------|------|--------|--------|
| Freezepoint Protection | | 20° F | 10° F | 0° F | -10° F | -20° F |
| Dry Material - Lbs./Gallon | Calcium Chloride (CaC12) | 0.8 | 1.2 | 1.5 | 1.8 | 2.0 |
| | Calcium Magnesium Acetate (CMA) | 1.3 | 1.8 | 2.2 | 2.6 | 2.7 |
| | Magnesium Chloride (MgC12) | 0.7 | 1.1 | 1.3 | 1.5 | 1.7 |
| | Potassium Acetate (Kac) | 0.7 | 1.7 | 2.1 | 2.5 | 2.8 |
| | Sodium Chloride (NaC12) | 0.8 | 1.0 | 1.7 | N/A | N/A |
| Liquid Material- Volume Mix Ratio | | | | | | |
| | Ethelyne or Propylene Glycol | 17% | 25% | 33% | 39% | 45% |



NORTH REGIONAL OFFICE
 900 Patterson Dr., Bloomsburg, PA 17815
 (888) 496-3625

SOUTH REGIONAL OFFICE
 8950 Hwy 5, Ste. D, Douglasville, GA 30134
 (770) 947-5103

FLORIDA REGIONAL OFFICE
 1963 W. McNab Rd., Pompano Beach, FL 33069
 (954) 984-4494

WEST REGIONAL OFFICE
 2001 Brennan Ave., Fort Worth, TX 76106
 (817) 624-0007