

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				
Freeze-point 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 (CaCl ₂)	140	209	251	307	335	66	99	119	145	159	81	122	146	178	195
	Calcium Magnesium Acetate (CMA)	223	307	377	433	461	106	145	178	119	132	130	178	219	251	268
	Magnesium Chloride (MgCl ₂)	126	181	223	251	279	59	86	106	119	132	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 (NaCl ₂)	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 2 Antifreeze Chemicals - Bulk Mix																
Yodock Barricade Model		2001SL					APC					Aerocade				
Freeze-point 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 (CaCl ₂)	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 (MgCl ₂)	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 (NaCl ₂)	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						
Freeze-point Protection		20° F	10° F	0° F	-10° F	-20° F
Dry Material - Lbs./Gallon	Calcium Chloride (CaCl ₂)	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 (MgCl ₂)	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 (NaCl ₂)	0.8	1.0	1.7	N/A	N/A
Liquid Material - Volume Mix Ratio						
	Ethelyne or Propylene Glycol	17%	25%	33%	39%	45%



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