

Product Data Sheet



Ice Ban, the Original Organic Inhibitor

In 1995 we started the revolution by introducing organically inhibited chloride based anti-icing / deicing fluids. Combining a corn based inhibitor with a liquid chloride solution, this patented (U.S. Patent No's. 5,635,101 & 5,965,058) anti-icing, deicing liquid provided superior performance at an affordable price. First introduced as a series of blends based on one inhibitor, the organic inhibitors have now been engineered to address the most significant applications encountered by today's snow and ice control professionals.

Ice Ban 305 is designed as an anti-icing and deicing liquid for sensitive environmental areas where significant reductions in phosphorus and nutrients are necessary to protect a fragile eco-system. Ice Ban 305 provides the protection you require with the performance you demand. Ice Ban 305 is a clear, colorless Magnesium Chloride based liquid delivering excellent performance, extremely low corrosion rates and a depressed freeze point of -67° F. All of these attributes add up to a product designed to maintain high service levels for the roads and the environment.

The included tables illustrate the engineered chemical and physical characteristics of Ice Ban 305.

Chemical & Physical Analysis

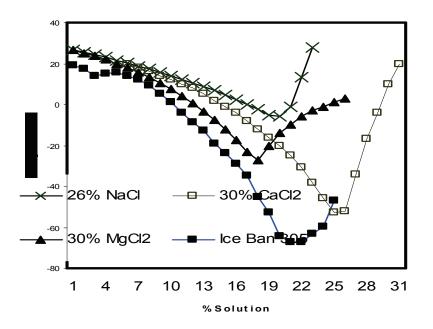
Component	Units	Typical	PNS Limit
MgCl ₂	%	25	25
Phosphorus	ppm	<0.05	25
Cyanide	ppm	<0.05	0.2
Arsenic (As)	ppm	<1.0	5
Copper (Cu)	ppm	<0.1	0.2
Lead (Pb)	ppm	<0.50	1
Mercury (Hg)	ppm	<0.02	0.05
Chromium (Cr)	ppm	<0.50	0.5
Cadmium (Cd)	ppm	<0.05	0.2
Barium (Ba)	ppm	<0.50	10
Selenium (Se)	ppm	<1.0	5
Zinc (Zn)	ppm	0.4	10
pH (1:4 Solution)		8.3	6-10
Corrosion Rate	%	17.1	<30

Component	Units	Typical
Specific Gravity	SGU (at 20°C)	1.276
TTL Settleable Solids (V/V)	%	≤1
Solids Passing #10 Sieve (V/V)	%	≥99
Freeze Point	-	-55° C / -67° F



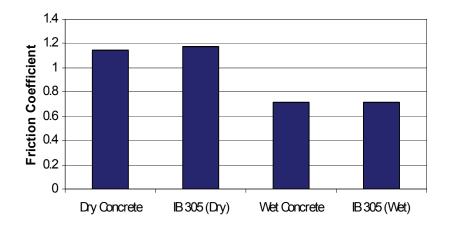
Increased Working Range, Decreased Maintenance Costs

The phase curve diagram below illustrates the increased effective range that Ice Ban 305 offers over 30% Magnesium Chloride, 30% Calcium Chloride and 26% Sodium Chloride (Salt). Ice Ban 305 has a eutectic point of – 77° F at a 21% Magnesium Chloride concentration solution. The increased working range of Ice Ban 305 greatly reduces the likelihood that the melted snow and ice will re-freeze between applications, reducing the need for excess treatments and additional trips by workers.



Safe for the Environment, Safe for the Public

Testing performed by Forensic Dynamics, Inc. in July 2001 on the friction characteristics of Ice Ban 305 show that a concrete surface treated with Ice Ban 305 had a friction coefficient slightly less than that of concrete wetted with water. When dry, the Ice Ban treated surface has a friction coefficient higher than that of dry concrete. In fact, Ice Ban 305 was one of the highest performing Magnesium Chloride based products ever tested.



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