



# 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  $-67^{\circ}\text{F}$ . 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 305.

## *Chemical & Physical Analysis*

Component	Units	Typical	PNS Limit
MgCl <sub>2</sub>	%	25	25
Phosphorus	ppm	0.08	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	<0.08	0.5
Cadmium (Cd)	ppm	<0.05	0.2
Barium (Ba)	ppm	<0.50	10
Selenium (Se)	ppm	<0.20	5
Zinc (Zn)	ppm	0.26	10
Molybdenum	ppm	5.8	-
Ammonia	ppm	4.4	-
pH (1:4 Solution)	S.U.	8.2	6-10
Corrosion Rate	%	24.9	<30
30 Day SS 304	-	<NaCl	-
30 Day SS 410	-	<NaCl	-
30 Day AL 2024	-	<NaCl	-
30 Day AL 5086	-	<NaCl	-

Component	Units	Typical
TTL Settleable Solids (V/V)	%	<1
Solids Passing #10 Sieve (V/V)	%	>99
Freeze Point	-	$-55^{\circ}\text{C}$ / $-67^{\circ}\text{F}$

# GMCO CORPORATION



## ICE BAN<sup>®</sup> 305

## Specification Data Sheet

### Product Description

Ice Ban<sup>®</sup> 305 is an all natural, unique and patented (U.S. Patent No. 5,635,101) anti-icing / deicing liquid chemical. It is a blend by volume of Ice Ban<sup>®</sup> and a 29%-31% Magnesium Chloride solution. Ice Ban<sup>®</sup> 305 is a **PNS Compliant** liquid that is non-toxic, bio-degradable and contains a naturally occurring corrosion inhibitor.

### Compliance

Ice Ban<sup>®</sup> 305 is not approved for human consumption. It is intended for use as an anti-icing / deicing liquid chemical.

### Applications

Ice Ban<sup>®</sup> 305 is intended for use as an ice and snow removal liquid chemical on highways and roads.

**Caution:** Extreme care and caution should be exercised when using an anti-icing chemical in advance of an approaching storm. The use and practice of applying anti-icing chemicals requires skill and specialized equipment. Liquid anti-icing chemicals can cause slickness if misused or over-applied. It is essential that conditions be evaluated individually to determine the most appropriate anti-icing program.

### Packaging and Shipping

Ice Ban<sup>®</sup> 305 is available in bulk form only. Bulk quantities are shipped by truck or rail.

### Storage and Handling

The storage of Ice Ban<sup>®</sup> 305 requires the normal precautionary procedures used for the safe handling of liquids. Periodic re-circulation is suggested during long term storage. If mists are present during handling, safety glasses or goggles and rubber gloves should be used and skin contact areas should be thoroughly flushed with water.

### Product Benefits

Ice Ban<sup>®</sup> 305 as tested in accordance with National Association of Corrosion Engineers (NACE) Standard TM-01-69 (1976 rev.), PNS modified exhibits corrosion values of at least 75% less than that of Sodium Chloride.

Ice Ban<sup>®</sup> 305 does not contribute to concrete scaling problems and has no adverse effect on the cohesive or adhesive strength of asphalt films.

### Stock Pile and Pre-wetting Agent

Ice Ban<sup>®</sup> 305 is used as a stockpile treatment agent or pre-wetting agent at the rate of 8 gallons per ton of salt and 10-12 gallons per ton of abrasives.

### Chemical Properties

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pH (1:4 Solution)	S.U.	8.2	6-10
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30 Day AL 5086	-	<NaCl	-

### Physical Properties

Component	Units	Typical
TTL Settleable Solids (V/V)	%	<1
Solids Passing #10 Sieve (V/V)	%	>99
Freeze Point	-	-55° C / -67° F

Ref. ALI# 2376 / 24471