

The Ideal Solution for Fighting the Toughest Winter Weather

FreezGard® Liquid Magnesium Chloride from North American Salt Company is a proven performer and is used in the toughest winter weather by transportation departments across the country for several reasons:

Among the best quality magnesium chloride products to be found in the market.

When used as recommended, makes roads safer.

Offers superior melting capability, while being less corrosive than other snow and ice removal chemicals.

North American Salt Company is committed to producing and distributing the highest quality and most effective products through our extensive distribution network.

Put FreezGard® Liquid to Work for You...

A Major Tool for Combating the Effects of Winter Storms

What is FreezGard?

FreezGard® is a magnesium chloride brine that has been processed to flow more freely at cold temperatures experienced both during and after a cold winter storm event.

3-Step Protection

Winter storm impact can be successfully combated with FreezGard® as part of your toolset. Use it for...

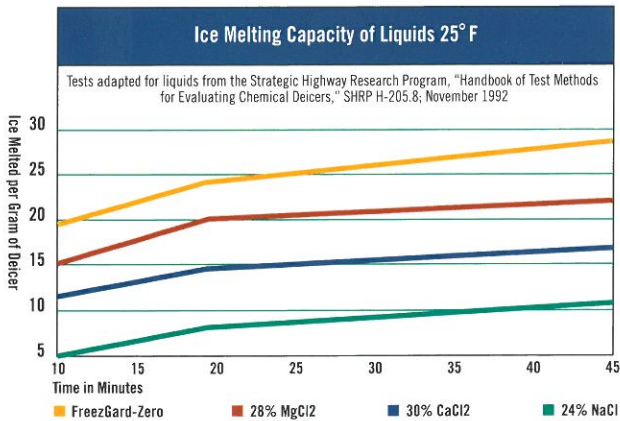
Anti-Icing - Applying before the storm or after plowing to prevent ice and snowpack.

Pre-wetting - Applying during and after the storm to treat sand and road salt.

Pile Treatment - Applying as a pile is being built to avoid pile freezing when it gets colder and is used.

What is Anti-Icing?

Anti-Icing is the application prior to a winter storm event or just after plowing during the event. This minimizes bonding of ice and snowpack to the pavement.



Pre-wetting and Pile Treatment

FreezGard® should be used to add to sand during application by the road crew. This pre-wetting method coats the sand/salt just prior to landing on the highway. The sand/salt melts into the ice and snowpack, keeping it on the road and increasing traction until the road is cleared. Adding FreezGard® to the sand pile as it is being formed helps keep the pile from freezing when it gets colder.

Reduced Environmental Impact

FreezGard® can be used in some circumstances to replace sand and gravel providing for additional benefits:

Suspending the use of sand greatly reduces air pollution. Anti-Icing helps eliminate the use of sand and assists compliance with Federal PM-10 regulations.

Spring cleanup on and near roads is no longer a cost item by eliminating sand.

Windshield and other vehicle damage is greatly reduced.

FreezGard® is made from natural products and has minimal environmental impact when properly applied.

Fast Acting

FreezGard® should be used to add to road salt when road crews apply salt during and after a winter storm. This pre-wetting method coats the road salt just prior to landing on the highway. As a liquid, FreezGard® begins melting immediately and creates a brine mixture that activates the road salt for faster melting benefit. This action not only begins the clearing process faster but also helps keep more of the road salt on the road.

Prevent Corrosion

Corrosion is a factor for equipment, road structures, and vehicles. FreezGard® is available with corrosion inhibitor added, reducing the effects when compared to Calcium Chloride and Sodium Chloride.

Corrosive Rates on Mild Steel Coupons	
Material	Corrosion Rate (10 day average)
3% Magnesium Chloride Solution	9.5 mpy
3% Calcium Chloride Solution	19.6 mpy
3% Sodium Chloride Solution	22.9 mpy

These procedures followed were in accord with NACE Standard TMO169-76 "Standard Test Method", "Laboratory Corrosion Testing of Metals for the Process Industries". Performed by Charles H. Pitt, Ph.D., P.E., Professor of Metallurgy, University of Utah; November 30, 1994.

Safer for Road Surfaces

Decreasing damage to the road surface is an important consideration when choosing an effective snow and ice product. FreezGard® is safer for use on aerated concrete which is used to build highways.

High Capacity Melting

Compared to other chemicals, FreezGard® has greater cold weather usefulness and effectiveness over a wider dilution range.

