



A CRITICAL TOOL FOR SAFER, EFFECTIVE WINTER ROAD MAINTENANCE



FreezGard® liquid magnesium chloride is a high-quality, economical anti-icing product from Compass Minerals. Thanks to its superior melting capability and advanced corrosion inhibitors, FreezGard is trusted by transportation departments across the country.

FREEZGARD CI PLUS MAGNESIUM CHLORIDE WITH CORROSION INHIBITORS

- Reduces the effects of corrosion on equipment and rebar by more than 85% when compared with regular sodium chloride (Figure 1).
- Meets Pacific Northwest Snowfighters (PNS) specifications for corrosion, metals, nitrogen, BOD, COD, biological toxicity and pavement frictional analysis.
- Decreases damage to surfaces on aerated concrete.

SUPERIOR ANTI-ICING AND DEICING PERFORMANCE

- Used before a snow event, FreezGard prevents the snow/ice bond to surfaces.
- An effective anti-icing program can save up to 30% on your total deicing budget.
- As a pre-wetting agent, FreezGard enables better road salt performance for faster melting and extended melting temperatures.
- Works down to -15°F and will remain a liquid when stored, even at these extreme conditions (Figure 2).

TYPICAL CORROSION RATES ON MILD STEEL

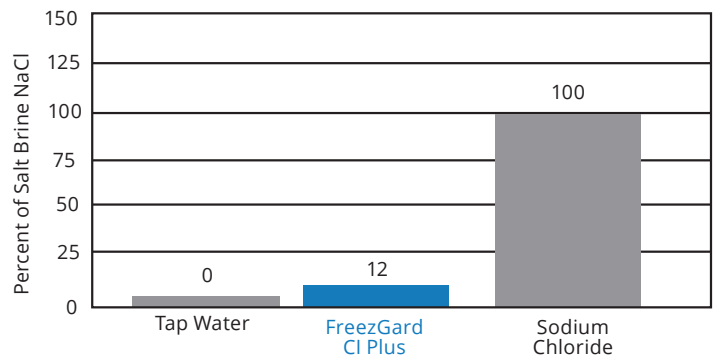


Figure 1. Corrosion effects on equipment and rebar based on PNS Certification and in-house testing data.

ICE MELTING CAPACITY OF BRINES AT 25°F

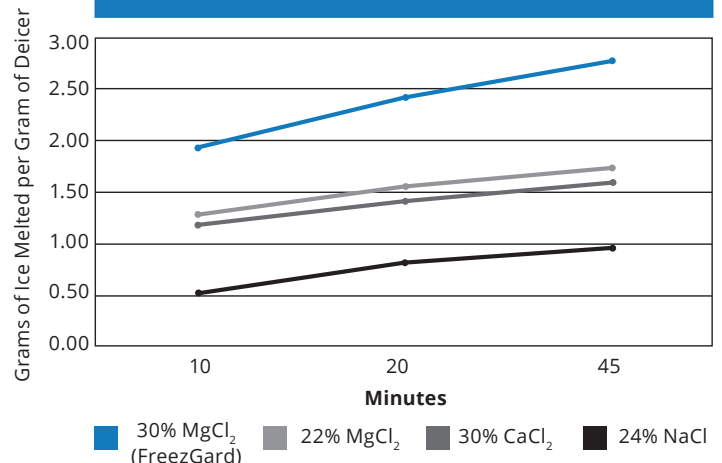


Figure 2. Ice melting capacity of FreezGard Zero at 25°F compared with other liquids.



COMBAT THE EFFECTS OF WINTER STORMS

ENVIRONMENTALLY FRIENDLY

- Made from 100% natural minerals and has minimum environmental impact when applied properly.
- Reduces the need for sand and gravel, which reduces spring cleanup and impact on lakes and streams.
- National Institutes of Health data show that magnesium chloride is less toxic than calcium chloride and potassium chloride (Figure 3).
- Works down to -15°F and will remain a liquid when stored, even at these extreme conditions.
- University studies show magnesium chloride products are a safer choice for turf grass than many other deicers on the market.

SAFER FOR ROADS AND INFRASTRUCTURE

- Causes less cracking, scaling and spalling of concrete surfaces as proven by Strategic Highway Research Program (SHRP) studies (Figure 4).
- Safe for use on aerated concrete.
- Purdue University demonstrated that MgCl_2 is less damaging to concrete than both CaCl_2 and NaCl .

CHEMICAL TOXICITY RATE

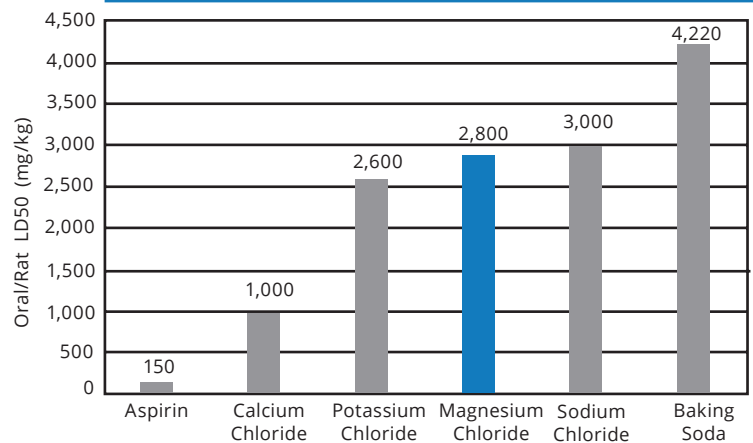


Figure 3. Chemical toxicity rate comparison according to data from National Institutes of Health. Toxicity is measured by a chemical's LD50 (Lethal Dose 50%); the greater the LD50, the lower the toxicity.

CONCRETE SPALLING COMPARISON

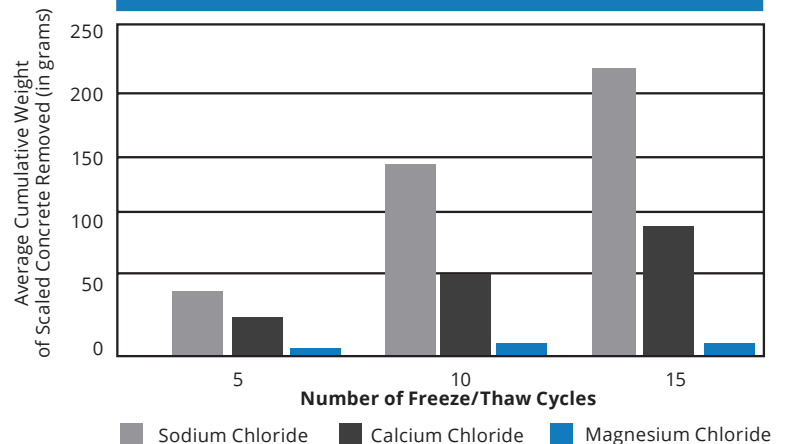


Figure 4. A comparison of concrete spalling among deicers based on data from Strategic Highway Research Program: *Handbook of Test Methods for Evaluating Chemical Deicers*.

For more information about making your operation more efficient with FreezGard®, contact us at **800-693-3334** or visit FreezGard.com.

