How Salt Works

NH Best Management Practices

BE PROACTIVE - ANTI-ICE

Anti-icing is the proactive method of preventing snow and ice from bonding to pavement. It can be more than 50% more efficient than deicing. See the NH Anti-Icing Factsheet for more information.

PRE-WETTING FOR FASTER ACTING SALT

Adding brine to salt before you apply it to pavement jump starts the melting process which means your pavement will be clear sooner. See the Pre-wetting Fact Sheet for more information.

KNOW YOUR LIMITS

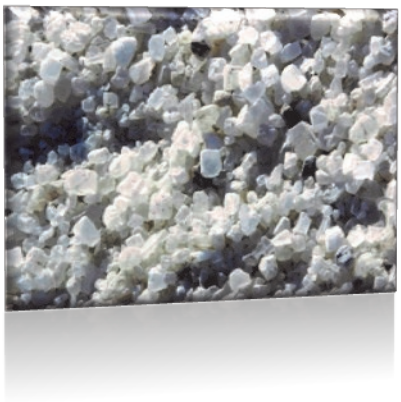
Dry salt becomes ineffective below 15°F if possible wait until the temperature rises before applying salt. At 30°F 1 lb of salt can melt 46.3 lb of ice in 5 minutes. At 15°F 1 lb of salt can melt 6.3 lb of ice in 1 hour.

PLOW FIRST

Always plow before applying any kind of chemical deicer to avoid pushing it away!

How Do We Melt Ice?

Ice can be melted by increasing the temperature, or lowering the freezing point of the water. It's not cost effective to use heat to melt ice on our roads so we use chemicals to reduce the freezing point—anything that will dissolve in water will work, including: salt, sugar, even alcohol!

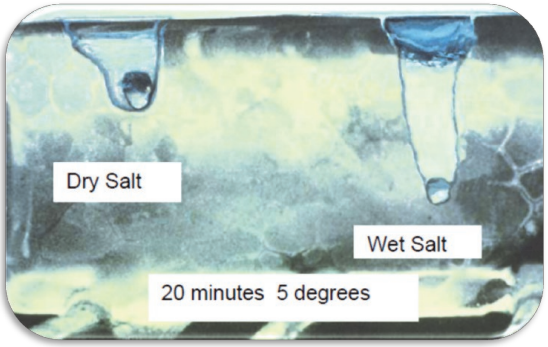


Why Use Salt?

Salt (Sodium Chloride) is the cheapest and most readily available chemical that efficiently melts ice and can be easily applied to our roadways and parking lots. However salt does corrode our cars and bridges, contaminates drinking water and pollutes our streams. Alternatives include potassium acetate, and calcium magnesium acetate (CMA), — all of which are considerably more expensive than calcium chloride, and have their own environmental concerns.

Brine Makes It Happen

The first step in melting ice is the formation of a brine. Salt crystals pull water molecules out of ice formation which creates a brine with a lower freeze point. Once the brine is formed melting is greatly accelerated. Save time and money by pre-wetting your salt with a brine before it hits the pavement to jump start melting! See the Pre-Wetting fact sheet for more information.



Source: Wisconsin DOT Transportation Bulletin #22

Save $$ and the Environment

In New Hampshire there are over 40 watersheds currently contaminated from road salt. As the pavement temperature drops more salt is required. As the pavement temperature rises less salt is required. Save money and the environment by using only what is needed to do the job. See NH application rate charts for recommended rates.

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