



December 2022 VR Monthly Newsletter “Conservancy Corner”

Ice Melt Considerations

Winter is here, and that means icy surfaces. We'd like to share what to consider when choosing ice melt products. Is it harmful to the environment? Will it harm my driveway? Is it harmful to my pets and wildlife? Oh, and of course, will it melt the ice?

Is ice melt environmentally friendly?

In large quantities, ice melt is not good for the environment. When large quantities of deicing chemicals find their way into the storm sewer system and eventually into a waterway (i.e., river or lake), they often react with other substances in the water which can cause harm to fish and wildlife. This is why it's important to only use as much as you need to get the job done, and avoid spreading it in areas of vegetation.

What's the best ice melt for concrete?

If you have newly poured concrete (anything less than a year old) it will be susceptible to damage from ice melts. Some experts recommended potassium chloride as the best ice melt for concrete. Since it acts slower than other melts, it gives the liquid more time to run off or evaporate. This reduces the amount of water to be absorbed by the concrete, which is what leads to those unsightly cracks. ***It's worth noting that any ice melt can potentially damage your concrete. Any chloride-based chemical will absorb into the porous surface of concrete and eventually damage its surface.*** Asphalt is generally more tolerant of chloride-based ice melts than concrete, but can still be damaged.

Is ice melt pet-safe?

"Pet-safe" is a bit of a broad term, but ***when it comes down to it, any ice melt is going to be potentially harmful to your pets.*** Calcium chloride and sodium chloride can irritate and burn their paws. Most melts can be toxic if ingested, so take care not to expose your pets to these products. You should also take precautions when storing ice melt.

Quikrete All-Purpose Sand: If you want to avoid anything potentially harmful to your pets or the environment, or if you have newly poured concrete (anything less than a year old is susceptible to damage from ice melts), then you might want to consider using sand to combat your ice problems. It won't melt the ice, but sand will add some extra traction when walking or driving over it.

There are essentially six different salts that are used as ice melt, each with their pros and cons.

Calcium chloride (CaCl₂) is one of the most popular options because it works quickly in temperatures as low as -40 degrees Fahrenheit. The problem is it can damage plants and grass if you use too much.

Magnesium chloride is considered environmentally friendly and better than most for use around pets. It lowers water's freezing point to -13 degrees Fahrenheit. The downside is that it could damage your concrete, asphalt, and plants.

Calcium magnesium acetate (CMA) is less corrosive than salts with chloride, but it's only effective in temperatures of 20 degrees Fahrenheit and above.

Rock salt is great because it's inexpensive, but it's problematic in a number of ways: It's damaging to just about any surface, lethal if pets ingest it, and doesn't work in low temps.



THE CONSERVANCY

— VICTORY RANCH —

Potassium chloride is considered safer for pets but is bad for plants and grass and only works in temperatures 25 degrees Fahrenheit and above.

Urea/carbonyl diamide is probably the safest option for pets and the environment, but it isn't very effective when used for deicing.

[Click here for specific product recommendations](#)