

Are you picking the right products to melt that ice away?

When it comes to de-icing sidewalks and driveways after a winter storm, not all salts are created equal. Most of the popular de-icing products sold in stores are chloride-based, each containing a different combination of salt. These products include: sodium chloride, potassium chloride, calcium chloride and magnesium chloride. Knowing what type of salt, you are buying at the store could make a big difference in protecting your plants, grass and even the concrete around your house.

Before we start talking about the different types of de-icers. I should say regardless of what product you plan on using, you should take the time to remove as much of the snow and ice as possible before applying your de-icing product. This is important as they just aren't effective if applied in the midst of snow. Don't get me wrong it will help some but it just doesn't help as much as we would like or expect. But I would suggest to let mother nature work for you if at all possible. If the weather the day following the storm is going to be clear and in the forties then we have to ask ourselves, do we need to use the de-icer or can we just let the sun take care of our problems and save your hard earned money.

If we have to use a de-icer than the best deicer for landscapes, that is readily available to homeowners is calcium chloride. Calcium chloride is the best as it works at extremely low temperatures, down to negative 25 degrees F. It is able to work at such low temperatures as it generates its own heat as it is mixing with water and dividing into calcium and chloride. Another big benefit is that calcium chloride doesn't harm plants if it is used correctly and not over applied.

Sodium chloride, or more commonly known as rock salt and is often mixed with sand or other materials. It is the most widely available and often the least expensive making it the most popular de-icer product used. But sodium chloride is only effective at melting ice when temperatures are 12 degrees F or higher. When temperatures get lower than that – as they often do in Kansas – sodium chloride products will not be able to do the job.

Magnesium chloride products are effective to 5 degrees F, while potassium chloride salts are the least effective, melting only to 20 degrees F.

Calcium magnesium acetate is a newer product that does not contain chloride. The chemicals work together to prevent snow particles from sticking together or to the surface. However, the product is effective only to 20 degrees F.

Regardless of the product, use just enough de-icer to get the job done. As excess amounts can harm your plants, animals and concrete surfaces, especially rock salt and potassium chloride.

Though chloride is in all of these products and that raises the potential for problems within the environment. The calcium chloride and the magnesium chloride products tend to not release as much chloride as the sodium chloride and the potassium chloride products do. Meaning that they are safer to use.

Some homeowners think that chemical fertilizers are the way to go. The issue with using fertilizers as a de-icer is you have to apply way more than is safe for your yard or surrounding plants. Even though you would think fertilizers should be safe for plants, the rates that you have to apply to be effective are actually quite damaging.

There are some natural products out there to use – wood chips, ash, sand, bird seed, and sunflower seeds just to name a few. These natural products just aren't overly effective in de-icing but can help provide traction on slippery surfaces.

So now that we know a little more about de-icers I encourage you to read the labels to make sure you know exactly what you are putting down, and how much to apply so that you know if you are putting your plants in harm's way.

Ryan