

## Ice melt – Not just a grain of salt

**By Samantha Goff**

*Tribune Sentinel Staff*

In just one storm alone, there could be up to 7,000 tons of rock salt spread over the roadways throughout a major city like Denver or Philadelphia, plus or minus a bit for more or fewer roadways.

That does not include what is put down on the outskirts, or statewide should the storm require statewide de-icing. It also does not include what is thrown down on sidewalks by residents, or in parking lots and on the sidewalks of businesses.

Add all of that up, and multiply that by the number of storms—then multiply that by the number of cities doing this and what do you get? A LOT of ice-melt!

So what's the big deal? Ice on the road makes for dangerous driving conditions, and nobody wants to slip and fall on their way out the door.

The most common ice-melt products have the main ingredient sodium chloride, most commonly called rock-salt. It is the cheapest ice-melt available, making it a favorite among consumers.

Unfortunately, the pros of the ice-melt only go so far.

De-icing products can be so harsh that they can actually eat away at outdoor surfaces like stone, brick and even concrete. Tracking it in on your shoes can also ruin indoor surfaces as well like wood, tile and carpet.

If that was where the problems ended we would be in pretty decent shape, we can replace those things, and probably would eventually anyway. However, ice-melt continues destructing long after the ice is gone. The melted ice flows into the ground as polluted water.

The massive amounts of sodium chloride seep into the ground, and can alter the chemical composition of the soil, the ground water, and even the plants that absorb it.

Undissolved ice-melt also has the potential to make your children and pets or even yourself sick. It is considered a skin and eye irritant and can cause burning or rashes if it comes in direct contact with the skin.

In some places, plowed snow is hauled and dumped into local lakes, rivers, ponds, or creeks, spreading the damage even further.

As you can imagine, just as this sodium chloride is harmful to us, or pets, and our ground water, it is just as, if not more harmful, to marine life. Especially marine life in a small pond, or an area that does not get natural water in and out. If it is done frequently enough, it can prove toxic to the aquatic habitat.

Sodium chloride, or rock salt, is also extremely difficult to filter out of drinking water, as it requires its own special process of osmosis to correct.

Though we may not have a whole lot of options, it does help to be aware. Shoveling

immediately, sprinkling sand for traction, and some swear by a mixture of alcohol, dish soap and warm water over an area before the freeze to prevent ice all together, though I have never tried it, but they are all good ideas to keep the need for ice-melt to a minimum. There are also products on the market that claim to be “green.”

It may also be helpful to know you can use about half of the amount of ice-melt if the ice is wet. If the temperature is below 15 degrees, sodium chloride is actually virtually ineffective.

Of course I don't want anyone to slip and fall or spin out on the highway, but there are alternatives available that are less damaging to the environment. We can also write letters to those in charge of such operations to be the squeaky wheel about making more economically aware decisions.

I only hope to spread the knowledge of the negative ways we impact the environment on a regular basis without giving it a second thought. It's great to be able to drive down the road the day after a blizzard, but it isn't free, it comes at a pretty hefty price.