



J&L Garden Center

The All Season Gift
and Garden Center

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Salt, Fertilizer, or Ice Melter?

Do not use fertilizer, salt, or ice melter on any concrete less than 1 year old. Use sand, kitty litter, or sawdust to control ice on new concrete. You can also mix sand, kitty litter, or sawdust with other ice melters on older concrete to help increase their effectiveness and increase traction. Be sure you have a good door mat by each door because the sand, kitty litter, and sawdust tend to stick to your shoes and will track inside the house each time you walk through the door.



De-icing salts are a vital part of winter driveway care, porch and step safety, and road maintenance. However, they can be harmful to most trees and shrubs along the roadside or next to porches or driveways. You would be amazed how much salt you bring home with you on your car every time you go to the grocery store or to work. This salt has to go somewhere, just try to make sure it doesn't end up in your flower gardens or on your shrubs.



Unfortunately, we have no control over the amount of salt used on the streets or how much salt gets plowed onto the parkstrip. We can, however, control how much salt or ice melter that we use on our sidewalks and driveways. All plants are affected by salt but some plants (especially the tender plants in this area) are more sensitive to salt damage than others.

Most de-icing salts are water soluble and salt damage can be minimized in the spring by flushing the salt away before it has a chance to damage plants. Applying 6 inches of water will flush about half of the salt away. Applying 12 inches of water will flush about 4/5 of the salt and 24 inches of water will flush 9/10 of the salt away. Unfortunately you cannot get rid of 100% of the salt so some salt damage may still appear on some of your plants. Gypsum can also help minimize salt damage. The calcium in gypsum replaces the salt in the soil, making the salt easier to flush away.



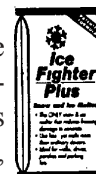
The most common ice melter used, the type used on most roads, is **sodium chloride** (table salt, rock salt, water softener salt). This ice melter is very effective and inexpensive. Sodium chloride will melt ice even on the coldest days of winter. The sodium in this salt is harmful to plants and can also damage the soil structure. Many soils in the western parts of the valley contain naturally high levels of sodium. This high sodium level is one of the main reasons gardeners in those areas have a hard time gardening



in their yards. Their plants can die from too much sodium and the dirt can be hard, or slimy, because of the excessive amount of sodium. You wouldn't add salt to your garden soils on purpose, so be careful that you don't accidentally add salt to your garden soil.

Sodium will also damage concrete, if used excessively. Take a look at many of the concrete roads in the valley or at your own sidewalks, driveways and porches. Do they have pitted surfaces? This damage is a direct result of ice melter damage.

Ice Fighter Plus is an excellent alternative to plain rock salt. It does contain sodium chloride, however, Morgro Chemical Company has mixed a patented polymer coating, **Propolyice**, with the salt which helps prevent damage to concrete. **Propolyice** inhibits water from penetrating into the concrete. By keeping the water out of concrete, the freezing-thawing damage caused by salt is reduced. If used correctly this ice melter will not harm concrete nor will it kill most plants.



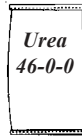
The second most common ice melter used is **potassium chloride**. This type of salt is not as effective melting ice as rock salt, but it is safer to plants and to concrete. This type of salt will melt ice until the temperature gets extremely cold. This type of salt is used in several ice melters including **Sno Plow Ice Melter**. Snow Plow Ice Melter is not as effective as Ice Fighter Plus but it is a lot less expensive than Ice Fighter and it is much safer to use than plain rock salt.



A third category of ice melters is garden fertilizers. Fertilizers are safer for plants but some fertilizers can be more damaging to concrete than salt is. If you use a fertilizer for melting ice make sure it does not contain any iron. Iron will make rust spots on cement that will take a long time to disappear. Too much fertilizer can also harm plants so be sure you apply fertilizer sparingly.



Urea is probably the safest garden fertilizer to use to melt ice. It does not damage concrete. In fact, the airport often uses Urea on its runways because it does not harm the concrete or the airplanes. Urea has a drawback though, it will only melt ice when the temperature is above 11 degrees Fahrenheit. Below this temperature Urea will not melt any ice. If you want to use Urea during very cold weather, try mixing 5 pounds of urea with a 50 pound bag of sand. The sand will help add traction when the temperature gets too cold for the urea to melt ice.



Ammonium Sulphate is another common fertilizer used as an ice melter. This fertilizer melts ice until the temperature is -25 degrees Fahrenheit. Ammonium sulphate is very harmful to concrete because the sulphur it contains reacts with concrete to create a mild acid, sulfuric acid. Sulfuric acid damages concrete worse than table salt does. Use Ammonia Sulphate to melt ice on asphalt and other non-concrete surfaces but do not use it on concrete sidewalks, steps, or driveways.



Balanced Fertilizers such as 16-16-16 or 5-10-10 (as long as they do not contain iron) will also melt ice. The nitrogen and potassium fertilizers in the mix will melt the ice. The phosphorus and other inert ingredients will add traction and skid resistance to the area you apply them.



Use all fertilizers and ice melters sparingly. One way to use less salt or ice melter is to mix a little sand, kitty litter, or sawdust with your ice melter. These materials do not melt the ice but they do add traction and make the ice less slippery. Make sure you have a good, sturdy door mat by each door if you use these materials because they will stick to your shoes and track into the house every time you go inside.

