

What You Can Do: Put your sidewalk and driveway on a low salt diet

Keeping ice and snow off your driveway and side walks is important for safety. The following tips can help you choose the best deicing product for your home and the environment.

1. Buy early. Make sure to buy your deicing product well before the big storm hits, otherwise you will be looking at empty shelves, and have few, if any, environmental choices to make at the store.

2. Check the label. The table below provides a summary of the pros and cons of main ingredients of common de-icing products. Check the package closely to see what the look closely to see what you are buying. I recommend using calcium chloride over sodium chloride (rock salt)

Check the Label For	Works Down to :	Cost	Environmental Risks
Calcium Magnesium Acetate (CMA)	22 to 25 degrees F	20 times more than rock salt	Less toxic
Calcium Chloride	-25 degrees F	3 times more than rock salt	Uses lower doses No Cyanide Chloride impact
NaCl: Sodium Chloride, also known as rock salt	15 degrees F	about 5 bucks for a 50 pound bag	Contain cyanide Chloride impacts
Urea	20 to 25 degrees F	5 times more than rock salt	Needless nutrients Less Corrosion
Sand	No melting effect	about 3 buck for a 50 lb bag	Accumulates in streets and streams

3. Avoid kitty litter and ashes. Although these products are environmentally friendly, they don't work. While they provide some traction, they do not melt snow and ice. Also, they tend to get real gooey and messy when it warms up, which often causes tracking on the floors of your home. If traction is what you want, then stick with sand, which is much cheaper and easier to sweep up.

4. Shovel early and often. When it comes to snow removal, there is no substitute for muscle and elbow grease. Deicers work best when there is only a thin layer of snow or ice that must be melted. So get out the snow shovel and move as much snow as you can during the storm if possible. A flat hoe can also help to scrape ice off the surface before any deicers are applied.

5. Know Your Salt-Risk Zone. You wouldn't want to kill your favorite tree, shrub or grass, so check out the plants that grow within five or ten feet of your driveway and sidewalk (and the road, for that matter). The table below summarizes some of salt sensitive plants that might be at risk. If you have salt-sensitive tree, shrub or grass in this zone, you should avoid any de-icing product that contains chlorides (rock salt and

calcium chloride), or use very small doses. You may want to use CMA as a safer alternative, or stick with sand for traction.

Landscaping Areas	Species at Risk from Salting
Deciduous Trees	Tulip polar, Green ash, Hickory, Red maple, Sugar Maple
Conifers	Balsam fir, White pine, Hemlock, Norway Spruce
Shrubs	Dogwood, redbud, hawthorn, rose, spirea
Grasses	Kentucky bluegrass, Red fescue

6. Avoid Products that Contain Urea. Some folks recommend the use of urea as a safer alternative, reasoning that it does not contain chlorides and, as a form of nitrogen, will help fertilize your yard when it washes off. In reality, urea-based deicing products are a poor choice. To begin with, urea is fairly expensive and performs poorly when temperatures drop below 20 degrees F. More to the point, the application rate for urea during a *single* deicing is ten times greater than that needed to fertilize the same area of your yard. Of course, very little of the urea will actually get to your lawn, but will end up washing into the street and storm drain. Given that nitrogen is a major problem in the Bay, it doesn't make sense to use nitrogen-based products for de-icing

7. Apply salt early, but sparingly. As Mom always told you, a little salt goes a long way. The recommended application rate for rock salt is about a handful per square yard treated (after you have scraped as much ice and snow as you can). Throwing any more salt down won't speed up the melting process. Even less salt is needed if you are using calcium chloride (about a handful for every three square yards treated – or about the area of a single bed). If you have a choice, pick calcium chloride over sodium chloride. Calcium chloride works at much lower temperatures and is applied at a much lower rate.