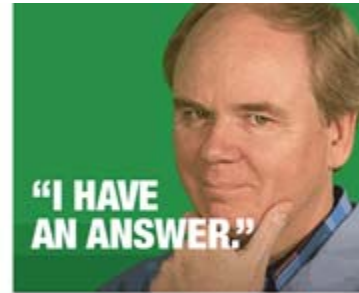


# THANK YOU FOR SUBMITTING YOUR QUESTION...



Submit Your  
Question Here

Watch Now



A Cargill Deicing Technology Product

## Your question:

What should be deicer of choice for wooden steps and decks?

## My answer:

As is often the case, the answer is "it depends." The materials and construction used in wood or composite steps and decks can vary widely and there really isn't a "one size fits all" best deicer for all applications. I think your best bet is to contact the manufacturer of your decking materials for recommendations on the best chemicals to use, but perhaps I can give you a little background information to help. One of the main concerns with deicers on wood decks is corrosion of the metal fasteners. If your deck contains metal construction materials, you will want to avoid all chloride based deicers (salt, magnesium chloride, calcium chloride, and potassium chloride) as these are all corrosive to steel. Low-corrosion alternatives to the chloride deicers are calcium magnesium acetate (CMA) or urea. As for effects on the wood material itself, the situation is less clear. I am not aware of any scientific studies of the effects of different deicers on wood or decking materials so most of the information we have is anecdotal and varies. Some people have used chloride deicers without incident while others have expressed concerns. Wood can be damaged by water over time, and some deicers have a tendency to "hang on to water" and not dry out. If a deicer is absorbed into a porous wood surface it may tend to keep the wood wet for a longer period of time. The commonly used deicers rank from most to least water absorptive in the following order: potassium acetate - calcium chloride - magnesium chloride - urea - salt - potassium chloride. I don't have a water absorption value for CMA, but based on qualitative experience I'd estimate that it is similar to urea.

Deicers that are absorbed into the surface of the wood may leave a visible stain from the residual chemical once the water evaporates. This may be less likely for deicers like calcium or magnesium chloride which will resist drying out, but then they resist drying out! I have seen some people recommend CMA for wood and decks, and you could contact a CMA manufacturer such as Cryotech to get further information about its suitability for wood structures from them. As for the shape of the deicer particles, it should not make much difference. Deicer particles are typically either crystals (like rock salt), round prills (CMA, urea, calcium chloride) or flakes (magnesium chloride or calcium chloride). From an ice melting performance standpoint, all of these shapes will work perfectly well and I don't think there is a significant advantage of one shape versus another for steps or decks. Hope this helps!

**Providing customers with deicing solutions that save lives,  
enhance commerce and reduce environmental impact.**