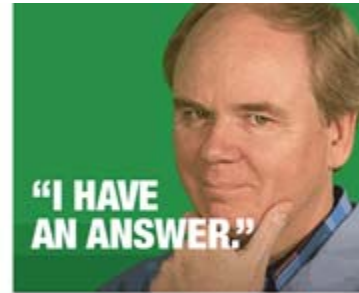


THANK YOU FOR SUBMITTING YOUR QUESTION...



Your question:

I am trying to preserve my spreaders and vehicles from the corrosive effects of salt. We are a company that applies salts in the snow removal process. Can you recommend products that remove the salt residue after applications and to preserve the plows for summer storage?

My answer:

I have not done any testing of products available to remove salt residues from equipment so I can't give you any specific recommendations. However, let me give you a little background information which may be helpful. You are correct that cleaning your equipment frequently to remove any chloride residues is the best way to minimize corrosion. Salt itself is highly water soluble (otherwise it would not be a good ice melter!) and it will dissolve in water alone given a sufficient degree of rinsing. Special cleaning solutions probably do not affect the ease with which salt can be dissolved and rinsed off the equipment directly, but they can help indirectly. Cleaning liquids and detergents are typically a solution of a type of chemical called a "surfactant," which is shorthand for a "surface active agent." When it comes to dissolving things, there is a general rule in chemistry that says "like dissolves like." This means that polar solvents (like water) tend to be best at dissolving polar chemicals (like inorganic salts in general) and nonpolar solvents (like gasoline) tend to be best at dissolving nonpolar chemicals (like many organics, dirt, and oils). A surfactant is a type of chemical that can bridge these two different situations. If you add a surfactant to water, it will help to dissolve dirt and oil residues that water alone cannot clean very effectively. This is important because in addition to salt, your equipment probably also gets exposed to dirt and other miscellaneous residues from the road as well as residues from any organic or agricultural additives you may use in your deicers. This additional dirt can form an adherent layer which may entrap salt and make it more difficult to remove. A detergent based cleaning solution can help to remove the miscellaneous dirt from your equipment better than a water spray alone, and thereby also facilitate the removal of any salt that is stuck to the equipment by oil or dirt. Detergent additives also enhance the sheeting action of water so that it will tend to flow off of a surface more efficiently, rather than bead up, and this also will help to more efficiently rinse residues from the equipment surface. I expect that a good all-purpose detergent product designed to wash trucks and equipment would be effective in facilitating the removal of salt residues from your equipment. I know there are products available that are positioned as especially effective for cleaning salt from trucks, but I have not tested any of them and have no basis for making a recommendation one way or the other. You might consider contacting the manufacturers of some of these products and see what information they can give you about their effectiveness.

Submit Your
Question Here

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enhance commerce and reduce environmental impact.