

Technical Bulletin

Environmental Concerns of Ice Melting Products

Morgro Chemical Inc. has been a manufacturer of Home, Garden and Agricultural fertilizers for over 50 years. Because of the experience we are in a unique position to address concerns of tree and shrub damage as well as environmental issues when using snow and ice melting compounds. It is very common in the fertilizer industry to use potassium chloride as a primary nutrient in fertilizer blends. Potassium chloride contains approximately 50% chlorides. Obviously chlorides are not as toxic as some manufacturers would have you believe.

While chlorides are a consideration, it is the over application of ice-melting products that are the major cause of damage to plant life. This is why both Sno-Plow® and Ice Fighter Plus® contain a harmless colorant so that the applicator has a reference as to how much product has been applied. This is not the case with white or crystalline products such as salt, calcium chloride and magnesium chloride. Being colorless is often difficult for the applicator to see how much product has been used on snow or ice.

Another major problem are the hygroscopic properties of the ice-melting product. Products that are very hygroscopic, that draw moisture from the air, plants or soil can cause burning in and of themselves. Magnesium chloride and calcium chloride are extremely hygroscopic and are prone to cause this kind of damage.

Don't be fooled by manufacturer's claims concerning the percent of chlorides contained in their products. The over application of any product especially those which are known to be hygroscopic can cause damage.

On a more practical level it is comforting to note that in the past 30 years we have not experienced a claim with either Sno-Plow® or Ice Fighter Plus® in reference to these issues.