

Ice Melter Product Fact Sheet

How Chemical Deicers Work

All chemical deicers work in the same way, although they have various performance levels. None is capable of melting ice or snow in its solid state, but must first come into contact with enough moisture to dissolve and form a brine. The brine lowers the freezing point of water and melts the ice or snow on contact.

Deicers melt their way downward until reaching the pavement. There, the brine spreads out, breaking the bond between the ice and pavement. Once sufficient undercutting has occurred the remaining ice and snow loosens and can be easily removed.

Performance of deicers depends on such factors as: elapsed time, temperature, traffic conditions, the length of time it takes to form a brine, the deicer particle shape and the duration of the deicer's melting action.

Chemical Deicer Comparison Chart

Product	Relative Deicing Speed	Lowest Practical Temperature	Effect On Concrete	Effect On Vegetation	Residue	Principal Use	Recommended Application Rate
Calcium Chloride Pellets or Flakes	Fast-acting deicer At all temperatures	-25°F	Does not chemically attack concrete	Can cause Damage to turf	Leaves no Powdery residue	Deicing walkways & steps: both Residential and commercial	2-4 oz per Square yard
Rock Salt	Slower than Calcium chloride Faster than Potassium chloride	+20°F	Does not Chemically attack concrete	Can cause Damage to turf	Leaves a white, Powdery residue	Highway deicing	8 oz per Square yard
Ice Breaker	Slower than Sodium chloride And about the Same as Potassium chloride	+12°F	Does not Chemically attack concrete	Use as recommended, will not harm vegetation	Leaves a white Powdery residue	Deicing walkways & steps: both Residential & Commercial. Grit Enhances traction	1 cup per Square yard
Urea	Slower than Sodium chloride And about the Same as Potassium chloride	+25°F	Does not Chemically attack concrete	Use as Recommended Will not harm vegetation	Leaves a white Powdery residue	Fertilizer (safe for Airport use)	None provided
Ice Melter	Slower than Sodium chloride	+12°F	Does not Chemically attack concrete	Use as Recommended, Will not harm vegetation	Leaves a white, Powdery residue	Deicing walkways & steps; both Residential & commercial	1 cup per Square yard

For all product refer to the bag label for cautionary statement.