



# CHLORIDESALES: A-Z Ice Melt Glossary

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**ABRASIVES** - Any material that does not have the capacity to melt snow and ice but does provide traction such as sand, gravel, sawdust, wood chips, pea gravel, kitty litter, etc.

**AIR ENTRAINMENT** - The addition of about 6% air in concrete to create voids.

**ANTI-CAKING AGENTS** - Additives to prevent salt caking; sodium ferrocyanide or yellow prussiate of soda, ferric ferrocyanide or Prussian Blue. Added at rate between 20 to 100 ppm.

**ANTI-ICING** - Anti-icing is the application of a deicer prior to an ice or snow event.

**APPLICATION RATE** - The amount of material applied per lane mile.

**BLENDS** - Deicing agents combined to gain differing effectiveness.

**BRINE** - Salts dissolved in water.

**CALCIUM CHLORIDE** - A naturally occurring white salt that has a deliquescence property making it absorb moisture easily and quickly. Calcium Chloride is exothermic which means that it releases heat as it melts, which aids in its melting capacity. Calcium chloride is hygroscopic meaning that it attracts moisture. It can be used when the temperature is lower than 20° F.

**CONCENTRATION** - The percentage by weight of the product in solution.

**CORROSION** - The deterioration of metals by oxidation or chemical action.

**DEICERS** - Substances which when applied to ice or snow on pavement cause the ice or snow to melt and lose the bond to the pavement.

**ENDOTHERMIC REACTION** - The absorption of heat. To work, salt requires moisture and heat from its surroundings (pavement and air), even in precipitation.

**EUTECTIC TEMPERATURE** - The lowest melting point possible or the lowest temperature a product will remain in solution, at some percentage by weight.

**EXOTHERMIC REACTION** - The release of heat, such as the action of calcium chloride when it is combined into a solution.

**FREEZING POINT DEPRESSION** - Change in the freezing point caused by the dissolving of an agent into ice or snow.

**HALITE** - Halite is a term used for rock salt (sodium chloride) crystals.

**MAGNESIUM CHLORIDE** - Magnesium chloride is a naturally occurring ionic halide that is extracted from sea water or natural brine. Magnesium chloride is hygroscopic in nature, which means it attracts the moisture that surrounds it. Magnesium Chloride can be used when temperatures drop below 20°F.

**MINERALS** - Salt is a mineral, not a chemical.

**ORGANICS** - Corn, beet or other agricultural based products.

**POTASSIUM CHLORIDE** - Potassium Chloride is naturally occurring metal halide salt which is composed of potassium and chlorine and is extracted from salt water. Potassium Chloride should not be used when temperatures are below 25°F.

**PRACTICAL TEMPERATURE** - Temperature to which deicers work on pavement outside of a laboratory setting.

**PRE-TREATING** - Same as anti-icing, the application of a product on a surface prior to a snow or ice event.

**PRE-WET SALT** - Salt that has been treated with a brine solution prior to spreading on the surface is called pre-wetted. Salt is treated with liquid calcium chloride or magnesium chloride. Pre-wetting allows rock salt to work at lower temperature than dry rock salt.

**SAND** - Sand does not melt ice. It is used for traction only.

**SODIUM CHLORIDE (ROCK SALT)** - Sodium chloride is a naturally occurring white salt, found in sedimentary beds. Rock salt is the most often used deicer. Rock salt should not be used alone when the temperature is below 20°F.

**SODIUM FORMATE** - Sodium formate is a solid runway deicer with corrosion inhibitors. It is fast acting and meets the FAA's performance and ecological requirements. Sodium formate can be used when temperatures drop below 20°F.

**TRUCK BED DEICER** - A truck bed deicer has calcium chloride, magnesium chlorides, corrosion inhibitors and a surfactant (soap-like substance) which makes the bed slippery and allows everything to melt and slide out when it is extremely cold.



**CHLORIDESALES**

Still have questions? Call us today for some answers.

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