

Liquid Salt Brine

Anti-icing measures take place before snow falls and ice forms on the roadway. They aim to prevent the bond of frozen precipitation to the road surface. In some circumstances, anti-icing can dramatically cut the cost of maintaining a safe road surface over conventional deicing. Anti-icing chemicals are applied in liquid form (salt brine) to road surfaces just before a snow or ice storm. Liquid sodium chloride (NaCl) is the most effective choice for anti-icing above 15° F (-9.4° C).

Anti-icing has many advantages:

- The roadway surface is never "lost." Snowfighters respond pro-actively
- Anti-icing returns road surfaces to normal faster, resulting in fewer accidents and delays
- Using a liquid ice-melter jumpstarts the melting process because salt needs moisture to be effective and only in freezing rain would an anti-icing application NOT be either pre-wet or an entirely liquid application.
- Brine doesn't bounce or blow off the road surface so material is used more efficiently
- If the storm is delayed, salt residue remains on the road ready to begin work when precipitation begins
- Crews can cover more territory by beginning treatment in advance of a storm
- Increased efficiency results in use of less salt, minimizing environmental concerns

Anti-icing measures are an important weapon in the snowfighter's arsenal. The appropriate use of anti-icing techniques results in:

- Returning to bare pavement conditions more quickly, saving lives and reducing property damage due to fewer accidents, as well as the reduction of traffic delays and avoiding the resulting reduction of losses to local economies;
- Reduction in the quantity of deicer use, resulting in cost savings and less environmental concerns; and
- Reduction in the manpower necessary to maintain safe road conditions, resulting in less overtime costs, less operator fatigue and safer working conditions.

