

Salt Brine Pre-Treatment Program

WHAT IS SALT BRINE?

Salt brine is water saturated with sodium chloride, or more simply rock salt dissolved in water. It became an integral part of Frederick County Public Works anti-icing program beginning in 2016 as a proactive approach to controlling snow and ice on roadways within Frederick County.

WHEN IS SALT BRINE USED?

Salt brine is applied by spraying it onto the pavement up to 72 hours prior to a winter storm.

PRE-TREATING

Pre-treating is a snow-fighting strategy used in anticipation of storms when accumulating ice or snow is predicted. If brine is applied before a winter storm, salt brine will begin working as soon as the first snowflake falls, which will help delay the accumulation of snow and ice on the pavement.

WHY USE SALT BRINE?

Salt brine is much more cost effective than straight salt. Brine allows the Public Works Highway Department to treat the streets prior to the storm. The ability to pre-treat the streets will help to keep snow and ice from bonding to the pavement. This will allow the roads to return to bare pavement much more quickly once the storm has passed.

HOW IS SALT BRINE APPLIED TO THE ROAD WHEN PRE-TREATING?

Motorists / residents can expect to see County Highway crews pre-treating the roads with salt brine using our specially modified trucks. These trucks will allow brine to be sprayed on the road surface at the correct volume per road mile.



WHAT SHOULD YOU DO WHEN FOLLOWING A VEHICLE APPLYING SALT BRINE?

Vehicles applying salt brine usually will be traveling less than thirty miles per hour. Motorists should stay approximately 500 feet behind the vehicle.

WHAT ARE OTHER ADVANTAGES OF USING SALT BRINE?

1. Anti-icing returns street surfaces back to normal faster, resulting in fewer accidents and delays.
2. Using a liquid material jumpstarts the melting process because salt needs moisture to be effective.
3. Brine doesn't bounce or blow off the road surface so material is used more efficiently.
4. Salt residue stays on the road, ready to work when precipitation begins.
5. Crews can cover more area for less cost by using brine.
6. Increased efficiency of brine results in less salt used per storm event. Less salt used = less cost.
7. Salt brine is better for the environment.