LIQUID DE-ICING SOLUTIONS

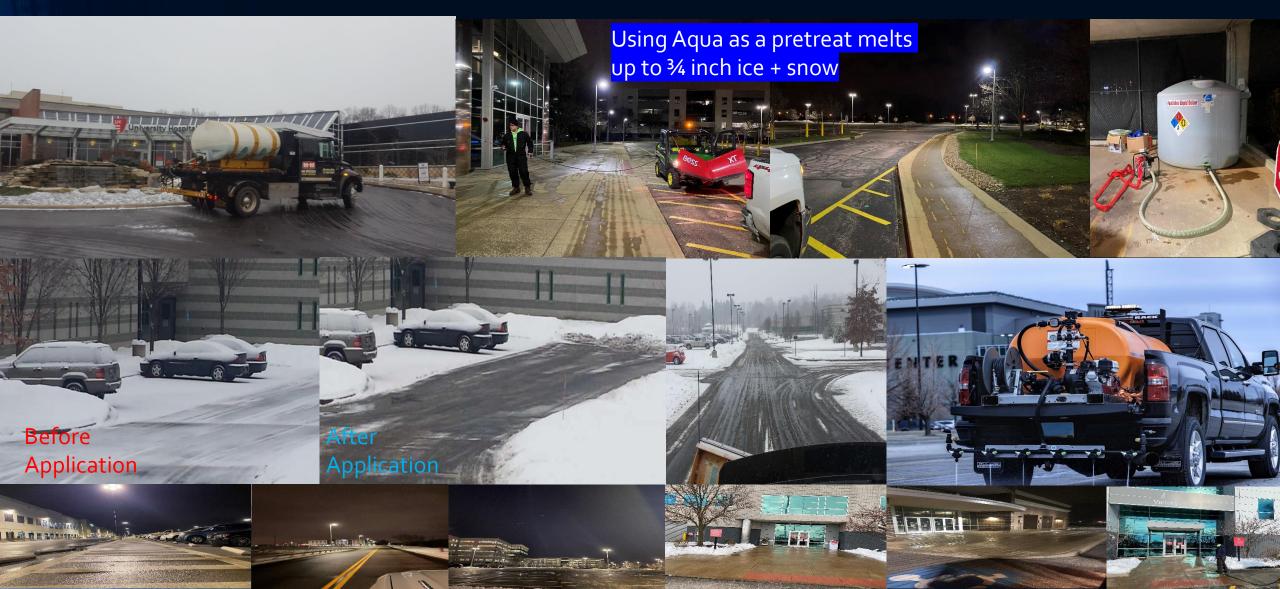
PREPARED BY:



WHAT IS AQUASALINA

- AquaSalina is a salt de-icer made from produced water (or brine) The Ohio Department of Transportion approved AquaSalina in 2004
- AquaSalina + Geomelt[®] has a documented freeze point as low as -20°F, unlike rock salt whose freeze point is 6'° F.
- Anti-icing is a treatment strategy aimed to prevent ice from bonding to the pavement surface or "black ice" formation, or as a pre-wetting solution to wet rock salt, which reduces "bounce" keeping more salt on the roadway.
- It is 70% LESS CORROSIVE THAN ROCK SALT! Saving your concrete, asphalt, doors, frames, carpets, and much more from unnecessary damage caused by salt.
- AquaSalina, like all salts may cause damage to freshly poured or green concrete and plantings although <u>it is 70% less corrosive than</u> rock salt and less damaging to plants than rock salt.

Driving Lanes and Sidewalks. What it looks like



What is the benefit for sidewalks?

- 1. Can do pre-treat or post-treat
- 2. Liquid tanks on machines get job done efficiently
- 3. Stays where you put it. Little to no tracking in buildings.
- 4. Truckload goes further-no overloaded trucks
- 5. No loading or disposing of bags
- 6. Fill walk behinds from spray truck or simple gravity feed saddle tank
- 7. Customers like proactive (used as a pre treat)
- 8. Reduced accumulation (up to ³/₄ inch melt) save money on shoveling and lot plowing
- 9. Saves on overall material cost AND labor costs over the season
- **10.** Significantly less risk of a slip and fall
- **11.** Coverage per gallon: 250 to 400 square feet based on sprayer and operator

SOME OF THE BENEFITS!



Parking Lot Benefits

Major Benefits to the customer – Proactive – Effects show immediately after plowing

– Less chlorides on the ground at the end of the storm –

Often faster results in colder temps with combo treatment

apply up to 100 gallons per acre from the tote

sprayer up to 24 hours in advance of a storm, plow and reapply; tweak to your needs.

and reapply; tweak to your needs.

No visible residue after storm.

Benefits to you – No bag handlers or loader operators needed – Less maintenance on equipment – Truckload goes further:

Application rates

Aqua Salina® A natural saltwater solution originating from ancient seas. Effective to -15°F and eliminates the need for Calcium chloride additives.

Aqua Salina ** Corrosion Inhibited AquaSalina* (PNS Approved and QPL Listed). On State Contract for ODOT, and approved for use by Ohio Turnpike and other government entities.

MK MK AquaSalina® and AquaSalina +®

SNOW / ICE REMOVAL

- Perfectly balanced by nature comprised of Calcium, Magnesium, Sodium, and Potassium chlorides
- 1 ½ times more ice melting capacity than manufactured salt brine
- Used effectively for deicing or anti-icing, without costly additions
- NO capital expenditures for brine makers
- Pre-treating surfaces ahead of storms reduces rock salt consumption by 30%
- NO chemical additions or mixing Just Load

AquaSalina® & AquaSalina+® Typical Application Rates

| DEICE | | | | |
|------------|----------------|----------------|--|--|
| Temps | High Traffic | Low Traffic | | |
| 25° - 32°F | 20 - 40 gal/lm | 20 - 40 gal/lm | | |
| 15° - 20°F | 30 - 50 gal/lm | 30 - 50 gal/lm | | |
| 10° - 15°F | 50 - 70 gal/lm | 50 - 70 gal/im | | |

| ANTI-ICE | | | |
|------------|----------------|----------------|--|
| Temps | High Traffic | Low Traffic | |
| 25° - 32°F | 20 - 40 gal/lm | 20 - 40 gal/im | |
| 15° - 20°F | 30 - 50 gal/lm | 30 - 50 gal/lm | |
| 10° - 15°F | 30 - 50 gal/lm | 30 - 50 gal/im | |

PRE-TREAT ROCK SALT 8 - 10 gal/lm @ 300 - 400 lbs/lm

PRE-TREAT GRIT/LIMESTONE PILES 10 gal/net ton

DUST SUPPRESSANT

- Hygroscopic (absorbs moisture from humidity in the air) ~ stays wet longer
- For use on:
 - Haul Roads and Quarries
 - Dirt Roads
 - ☑ Drilling Locations and ConstructionSites

AQ+GEOMELT55

- Combines AquaSalina+* with GEOMELT* 55 (85/15%)
- Reduce bounce and scatter Good retention on road
- Premixed Just Load and Go!
- PNS certified freeze point of -11°F
- Environmentally friendly Renewable beet addition to re-purposed saltwater
- The ONLY combined saltwater and beet corrosion inhibited product meeting PNS Specifications and QPL Listed

AQ+GEOMELT55 Typical Application Rates

| | DEICE | |
|------------|----------------|----------------|
| Temps | High Traffic | Low Traffic |
| 25° - 32°F | 20 - 30 gal/lm | 20 - 30 gal/im |
| 15° - 20°F | 30 - 50 gal/lm | 30 - 50 gal/lm |
| | ANTI-ICE | |
| Temps | High Traffic | Low Traffic |
| 25° - 32°F | 20 - 30 gal/lm | 20 - 30 gal/im |
| 15° - 20°F | 30 - 50 gal/im | 30 - 50 gal/lm |

| PRE-TREAT | ROCK SALT |
|-----------------|------------------|
| 8 - 10 gai/im @ | 300 - 400 lbs/lm |