

ROAD MAINTENANCE PRODUCTS

PNS-APPROVED
PRODUCTS



ROAD MAINTENANCE

PNS-APPROVED PRODUCTS MADE IN THE UNITED STATES



Quality Control Specialist Charles Smith at Pleasantville, IA

At Smith Fertilizer & Grain, we work diligently to provide well-rounded services for all your anti/deicing products from the BEET 55™ and Husker Plus™ line to many other products. Our continuous efforts bring the finest technology and services to you. We provide road maintenance services year round to meet your every need. We are here for you.

Along with liquid product, SFG provides a wide array of aggregates. Call us for special arrangements.

Our staff have a combined 44 years of experience and are extremely knowledgeable in road maintenance services. This experience has helped them develop strong relationships with clients around the United States. They are committed to providing quality products with excellent service for your deicing needs.



We want to thank the following:

Clear Roads
Wilkening & Associates LLC
Forensic Dynamics

LESS CORROSIVE | MORE EFFECTIVE



Corporate Office: Knoxville, Iowa

Drive on a wintry roads treated with salt and your car becomes covered in the corrosive white salt. What is not seen, and is even worse, is that the chemical nature of nearly all anti-icing and deicing products accelerates metal corrosion on bridges, damages vegetation and becomes less effective once the temperature lowers.



Liquid Headquarters: Pleasantville, Iowa

Looking for safer alternatives? Many state D.O.T., local government and private contractor agencies in the regions receiving high snowfall in the U.S. have turned to renewable sources for innovative products that are all natural. BEET 55™, Beet 55 Plus and HUSKER PLUS™ are renewable, anti/deicing SFG products. Very few products on the market today compare to the SFG products in aiding customers in the fight against snow and ice on the roads today.

With growing concern about chlorides and the effects of salts on the environment, today's ice solutions require a more environmentally friendly approach. This approach is proven to be effective at low temperatures, has longer residual activity and reduces corrosiveness on all surfaces.

SFG now offers off-site training classes conducted at your location for convenience to you and your staff. Please call our staff with questions or to schedule an appointment date and time.



**NORTH
AMERICAN
DISTRIBUTORS**

SFG is always looks to expand into new regions. We are currently searching for distribution centers in the western United States to sell our SFG products. Contact us about distribution opportunities.



BEET 55™ Liquid Organic Accelerator

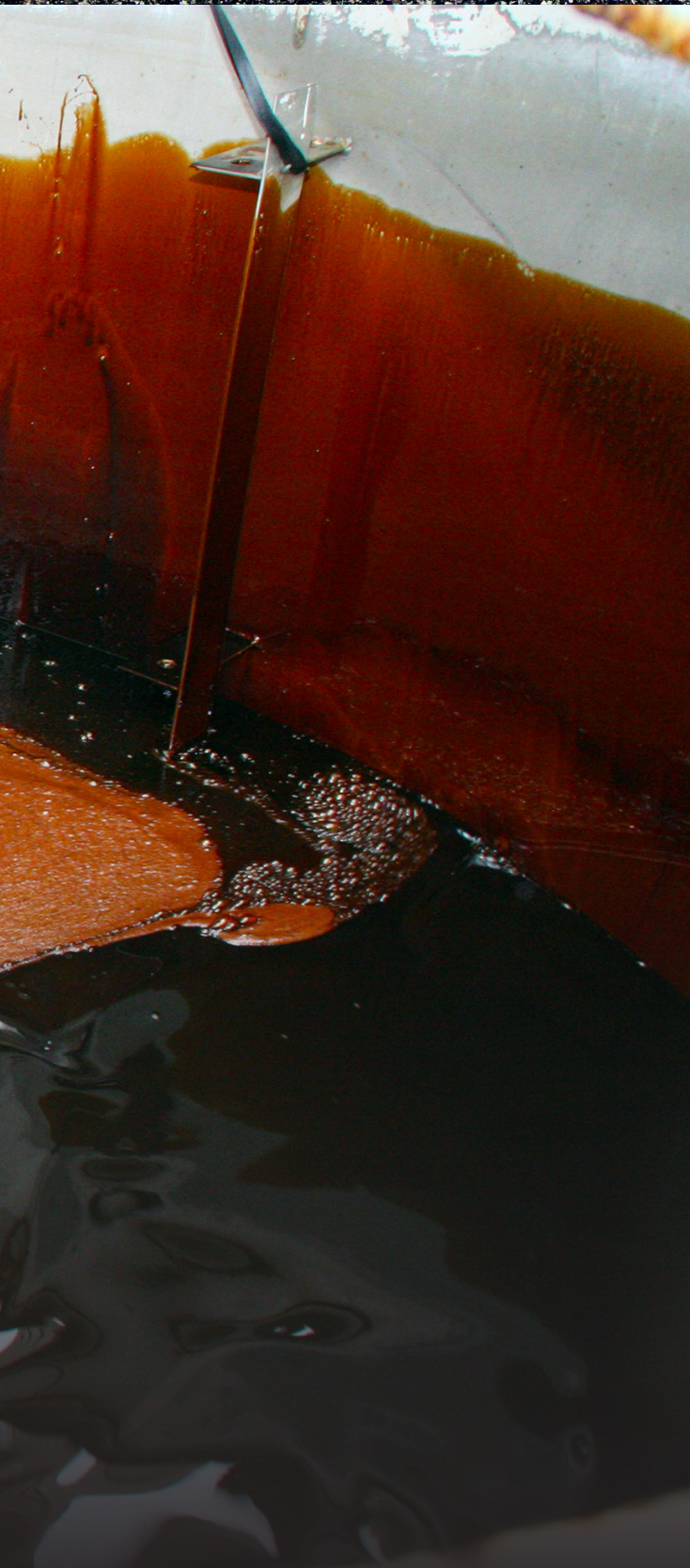
- BEET 55™ is a natural agricultural product that features snow and ice control performance superior to traditional brines. Plus, it's 75 percent less corrosive.
- BEET 55™ is derived from a renewable resource, sugar beet molasses, providing a sustainable and environmentally safe alternative.
- BEET 55™ will reduce salt application rates by 50 percent and substantially reduce operating costs.
- BEET 55™ is primarily used as a performance enhancer to salt brine, calcium and magnesium blends.

BEET 55™

- BEET 55™ products work faster and in a greater range of temperatures. BEET 55™ products do not need sunlight to activate.
- BEET 55™ will decrease salt and chloride usage up to 50 percent.
- BEET 55™ is a renewable, environmentally safe product.

TYPICAL PROPERTIES

Appearance	Brown
Freeze Point	Minimum -6°F
Specific Gravity	1.275-1.34
pH	5.0-10.0
Weight	10.6 lbs/gallon



BEET 55™ Anti-icing Liquid Application

- BEET 55™ is recommended to be blended from 10 percent to 35 percent with salt brine and other chlorides.
- Apply 20 to 80 gallons per lane mile.
- Rates vary depending on environmental conditions.

Anti-icing Liquid Benefits:

- Residual will last 5–10 days.
- Apply before storm event to prevent bonding.
- Decreases needed man hours and increases equipment efficiency.

BEET 55™ Deicing Liquid Application

- Rates will vary with depth of hardpack and temperature conditions.
- 20 to 80 gallons is recommended per lane mile.
- For severe hardpack and icy conditions, add 10 percent calcium chloride to the anti-icing recommendations.
- Super blends are common blends of sodium chloride, BEET 55™, magnesium chloride or calcium chloride.

Deicing Liquid Benefits:

- Residual will last 5–10 days.
- Faster, more powerful melting capacity.
- Decreases man hours and increases equipment efficiency.



BEET 55™ Salt Treatment

Stockpile Application

- Add BEET 55™ at 5–6 gal/ton (21–25 liters/metric ton).
- Optional: add 1–2 gallons sodium/magnesium/calcium brine.



Stockpile & Spinner Benefits

- Prevents freezing and crusting and keeps salt free flowing (*Applies to stockpile treatment*).
- Reduces corrosion.
- Reduces salt application rate up to 50 percent.
- Specifically targets hardpack and ice.
- Helps reduce bounce and scatter loss.
- Beet 55™ treated salt will cover up to 50 percent more area than untreated salt.

Spinner Application

- Add BEET 55™ at 10 gal/ton.
- When treating with a BEET 55™/chloride mixture, use 15–30 gal/ton.

BEET 55™ Suggested Application

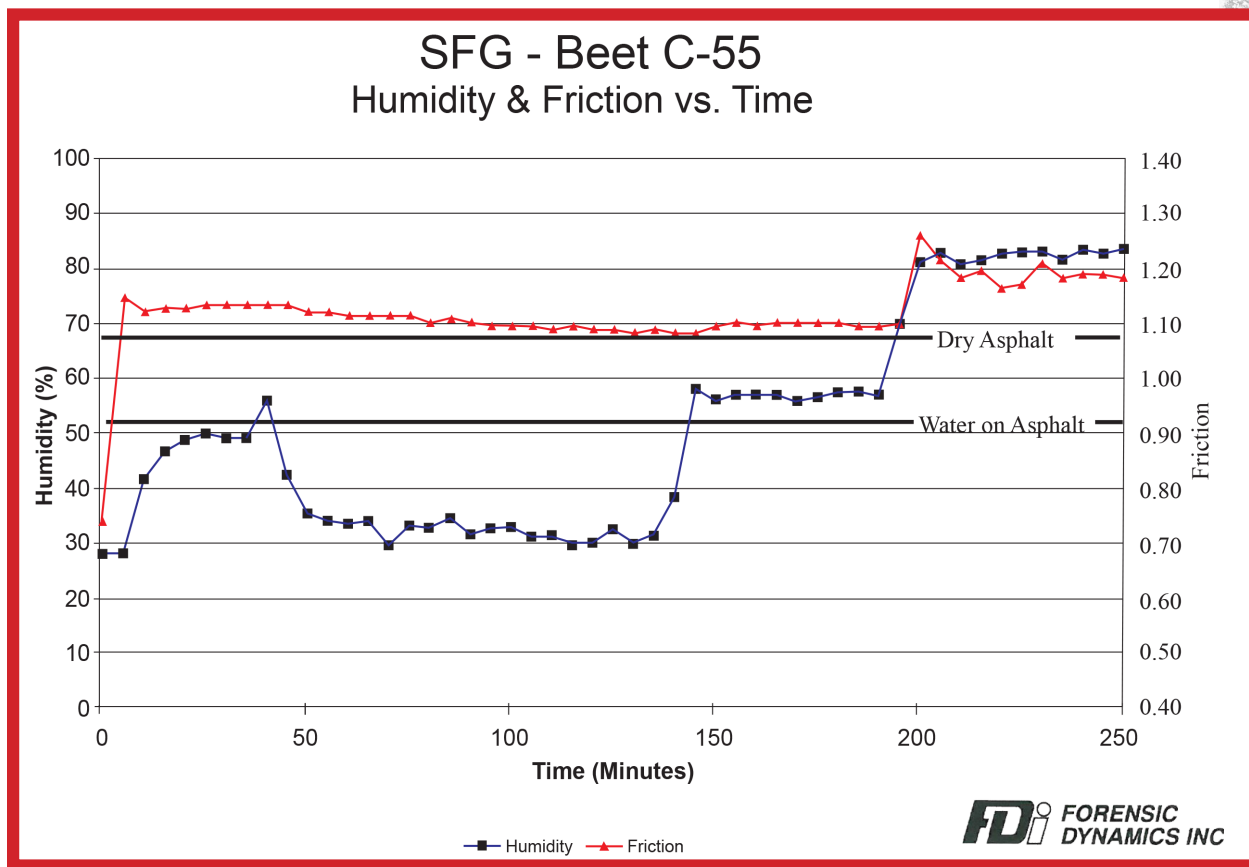
- The suggested usage rates should be considered as starting points and adjusted based on weather expectations, current local conditions, performance levels and road usage.
- We recommend adding a superblend product at the spinner at temperatures below 15°F.





Friction Testing

Many tests are performed to become a Clear Roads approved product. One of the tests required, with results shown here, is a friction test. Recognized for their dedicated research, Forensic Dynamics, Inc. is well-known for providing exceptional data results and graphs of the friction test results.



BEET 55™ & Friction Testing

BEET 55™ underwent strict testing by the Clear Roads research program and passed all testing. Above is the supplied friction test report. As you can see by using beet (red line) traction to pavement increased on wet pavement. The surprising aspect is that BEET 55™ improved traction on dry pavement. The test results are for you to look over. Call our sales staff team if you have any questions regarding BEET 55™.



HUSKER PLUS™ Liquid Organic Accelerator

- HUSKER PLUS™ has the most active organic ingredients in any stand alone product on the market today at 54 percent.
- HUSKER PLUS™ is the next generation of winter maintenance liquids, and passes Clear Roads standards with ease.
- HUSKER PLUS™ is a high-performance Clear Roads approved standalone product compatible with all chlorides.
- HUSKER PLUS™ has a minimum freeze point of -21°F and is 90 percent corrosion free.
- HUSKER PLUS™ is formulated to provide superior performance, while meeting Clear Roads standards as a finished product applied to the road.
- HUSKER PLUS™ has main ingredients that are agricultural-based renewable products.
- HUSKER PLUS™ excels at breaking through hardpack and icy road conditions.
- HUSKER PLUS™ can be blended with magnesium or calcium chloride and have excellent results.



TYPICAL PROPERTIES

Appearance	Brown
Freeze Point	Minimum of -21°F
Specific Gravity	1.28-1.31
pH	6.0-9.0
Weight	10.83 lbs/gallon
Concentration	54 percent



HUSKER PLUS™ Anti-icing Liquid Application

- HUSKER PLUS™ can be blended with all chlorides.
- HUSKER PLUS™ inclusion rate of 10–25 percent is recommended for optimum performance.
- 20 to 80 gallons per lane mile are recommended, but rates will vary with environmental conditions.

Anti-icing Liquid Benefits:

- Residual will last 5–10 days.
- Apply before storm event to prevent bonding.
- Decreases needed man hours and increases equipment efficiency.

HUSKER PLUS™ Deicing Liquid Application

- HUSKER PLUS™ blended with salt brine works at minimum -10°F.
- HUSKER PLUS™ inclusion rate of 10–25 percent is recommended for optimum performance.
- Rates vary on conditions of the environment, apply 20 to 80 gallons per lane mile.
- HUSKER PLUS™ can be blended with sodium chloride, magnesium chloride or calcium chloride.

Deicing Liquid Benefits:

- Residual will last 5–10 days.
- Faster, more powerful melting capacity.
- Decreases needed man hours and increases equipment efficiency.



HUSKER PLUS™ Stockpile Application

- Add HUSKER PLUS™ at 5–6 gal/ton (21–25 liters/metric ton).
- Reduces corrosion.
- Reduces application rate by 50 percent.
- Reduces bounce and scatter loss.
- HUSKER PLUS™ treated salt will cover up to 50 percent more area than untreated salt.

Stockpile Benefits

- Prevents freezing and crusting and keeps salt free flowing.
- Reduces corrosion.
- Reduces application rate by 50 percent.
- Reduces bounce and scatter loss.
- HUSKER PLUS™ treated salt will cover up to 50 percent more area than untreated salt.

Pretreat Application at the Spinner

- Add HUSKER PLUS™ at 10 gallons per ton.
- When treating with a HUSKER PLUS™/chloride mixture, use 15–30 gallons per ton.

Pretreat Benefits

- Extremely effective on hardpack.
- Reduces bounce and scatter loss.
- HUSKER PLUS™ treated salt will cover 30 percent more area than untreated salt.
- A blends of 80 percent salt brine and 20 percent HUSKER PLUS™ is recommended.

Hand Treating Salt

Stephen Leeds, Deicing Sales Manager



OTHER PRODUCTS WE CARRY

Along with all the liquid products, SFG also provides granular products to help with your snow and ice season. Below is the list of other liquid and granular products that we offer for your anti-icing/deicing needs.

Liquids

Calcium (32 percent calcium)

Calcium is always on hand and available for your convenience. Calcium is a beneficial product that is easily mixed with all SFG products.

Salt Brine (23.3 percent sodium)

SFG can make salt brine on site for your convenience. A hard-hitting salt brine can be used in many ways for your ice-fighting needs.

Super Blends

BEET 55™ Complete and HUSKER PLUS™ RTU
(These are our most popular blends)



Applying Husker Plus RTU

Granular

Beet Salt™

Beet Salt™ is a granular deicing product that features ice control performance superior to traditional highway salt, but is less corrosive and can reduce overall environmental damage from winter maintenance operations. Beet Salt™ is a cost-effective method when compared to using untreated salt. Beet Salt™ can be made on demand and is stored only at the Pleasantville, Iowa, location.

ProSlicer® (sodium chloride, proprietary additive)

ProSlicer® is a high-performance granular ice melter that is coated with a liquid deicer to give it that one-two punch for fast melting power. The vivid purple color quickly melts ice and snow down to -20°F and is safe on concrete, vegetation and pets. ProSlicer® is economically the right choice for your winter maintenance needs, available in 50-pound bags, pallets and even semi load lots.





ROAD MAINTENANCE

CONTACT US

**THE SFG TEAM IS HERE TO HELP YOU
WHENEVER YOU NEED US.**

Orders, Billing, Sales & Information

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