Mother Nature’s Own Blend

Exclusively Produced by
REDMOND MINERALS, INC.
Redmond, Utah 84652
High Performance Deicers
Deicer Performance Factors

- Melting Power
- Corrosion
- Environmental Impact
- Product Handling Issues
- Effect on Service Level to Public
- Total Cost
**What Is IceSlicer?**

Ice Slicer is a **homogenous** (not blended) product containing:

<table>
<thead>
<tr>
<th>Mineral</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complex Chloride™</td>
<td>92-96%</td>
</tr>
<tr>
<td><em>(Magnesium, Calcium, Sodium &amp; Potassium Chloride)</em></td>
<td></td>
</tr>
<tr>
<td>Water – contained as moisture to 3% maximum (RS)</td>
<td>2.5%</td>
</tr>
<tr>
<td>Sulfur</td>
<td>0.13%</td>
</tr>
<tr>
<td>Iron</td>
<td>0.07%</td>
</tr>
<tr>
<td>Phosphorous</td>
<td>0.05%</td>
</tr>
<tr>
<td>Iodine</td>
<td>0.002%</td>
</tr>
<tr>
<td>Zinc</td>
<td>0.001%</td>
</tr>
<tr>
<td>Copper</td>
<td>0.0007%</td>
</tr>
<tr>
<td>Manganese</td>
<td>0.0007%</td>
</tr>
<tr>
<td>40+ Trace Minerals &amp; Micro-Nutrients</td>
<td>&lt; 0.005%</td>
</tr>
</tbody>
</table>

*IceSlicer* contains all-natural corrosion inhibitors and environmental buffers crystallized **within** each granule - not just sprayed on the surface.
Unique IceSlicer Advantages

- Safer roads: Decreased accident rate
- Fewer trucks & less equipment to cover more lane miles
- Equipment and road infrastructure will last longer
- Less time to fight each storm: IceSlicer melts faster, lasts longer
- Safer roads = Decreased liability
- Decreased clean-up time (compared to sand)
- Lower environmental impact
- Improved public perception of winter maintenance efforts
- Lower total cost
ICE SLICER has the best of both sand and salt without the negatives!

<table>
<thead>
<tr>
<th>Benefits of Sand:</th>
<th>Negatives of Sand:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Provides instant traction</td>
<td>• Clogs sewers &amp; drains</td>
</tr>
<tr>
<td>• Easily visible</td>
<td>• Chipped/cracked windshields</td>
</tr>
<tr>
<td>• Readily available</td>
<td>• Requires cleanup</td>
</tr>
<tr>
<td></td>
<td>• Negative environmental impact</td>
</tr>
<tr>
<td></td>
<td>• High overall cost</td>
</tr>
<tr>
<td></td>
<td>• Aesthetically unpleasing</td>
</tr>
<tr>
<td></td>
<td>• Sand does not melt snow or ice</td>
</tr>
</tbody>
</table>
ICE SLICER has the best of both sand and salt without the negatives!

Benefits of Salt:
• Effectively melts snow and ice
• No cleanup
• Inexpensive initial cost
• Readily available

Negatives of Salt:
• Highly corrosive
• Effective only above 20°
• Negative environmental impact
• High overall cost
The Best of Both Worlds

ICE SLICER has the best of both sand and salt without the negatives!

Benefits of ICE SLICER
• Effectively melts snow and ice down to 0°
• No cleanup
• Provides instant traction
• Readily available
• Positive public perception
• Friendlier environmentally
• 70% less corrosive
• Lower overall cost
• More efficient – use less product and see superior results

Negatives of ICE SLICER
• Single production facility – potentially higher cost depending on location
## Who’s Using ICE SLICER?

A sampling of some of the Armed Forces Bases, Cities, Counties, Towns and States that use ICE SLICER.

<table>
<thead>
<tr>
<th>Arizona DOT</th>
<th>Fort Lupton, CO</th>
<th>Fort Collins, CO</th>
<th>Missouri DOT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arvada, CO</td>
<td>Fort Collins, CO</td>
<td>Gillette, WY</td>
<td>Nebraska DOT</td>
</tr>
<tr>
<td>Aurora, CO</td>
<td>Glenwood Springs, CO</td>
<td>Grand Lake, CO</td>
<td>New Castle, CO</td>
</tr>
<tr>
<td>Berthoud, CO</td>
<td>Greeley, CO</td>
<td>Jackson Hole, WY</td>
<td>New Mexico DOT</td>
</tr>
<tr>
<td>Boise, ID</td>
<td>Kansas City, MO</td>
<td>Kearney, NE</td>
<td>NORAD</td>
</tr>
<tr>
<td>Boulder, CO</td>
<td>Kersey, CO</td>
<td>Lakewood, CO</td>
<td>Offutt Air Force Base</td>
</tr>
<tr>
<td>Broomfield, CO</td>
<td>La Salle, CO</td>
<td>Lincoln, NE</td>
<td>Salt Lake City</td>
</tr>
<tr>
<td>Carbondale, CO</td>
<td>Littleton, CO</td>
<td>Longmont, CO</td>
<td>Park City, UT</td>
</tr>
<tr>
<td>Casper, WY</td>
<td>Louisville, KY</td>
<td>Loveland, CO</td>
<td>Summit Co., UT</td>
</tr>
<tr>
<td>Castle Rock, CO</td>
<td>Minnesota DOT</td>
<td>La Salle, CO</td>
<td>Sidney, NE</td>
</tr>
<tr>
<td>Cheyenne, WY</td>
<td>Washington DOT</td>
<td>Lincoln, NE</td>
<td>Texas DOT</td>
</tr>
<tr>
<td>Chicago, IL</td>
<td>Thornton, CO</td>
<td>Littleton, CO</td>
<td>U.S. Air Force Academy</td>
</tr>
<tr>
<td>Colorado DOT</td>
<td>Longmont, CO</td>
<td>Fort Lupton, CO</td>
<td>Utah DOT</td>
</tr>
<tr>
<td>Cripple Creek, CO</td>
<td>Louisville, KY</td>
<td>Fort Collins, CO</td>
<td>Vail, CO</td>
</tr>
<tr>
<td>Denver, CO</td>
<td>Greeley, CO</td>
<td>Glenwood Springs, CO</td>
<td>Victor, CO</td>
</tr>
<tr>
<td>Denver International Airport</td>
<td>Kansas City, MO</td>
<td>Kearney, NE</td>
<td>Washington DOT</td>
</tr>
<tr>
<td>Denver-Waste Water</td>
<td>Kersey, CO</td>
<td>Lakewood, CO</td>
<td>Wellington, CO</td>
</tr>
<tr>
<td>Management</td>
<td>La Salle, CO</td>
<td>Lincoln, NE</td>
<td>Westminster, CO</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Windsor, CO</td>
</tr>
</tbody>
</table>
ICE SLICER and the Environment

ICE SLICER is:

- **Non-Toxic**
  Food-grade products are mined from the same deposit

- **Public-Friendly**
  Won’t stain carpet, shoes, asphalt, cement, etc.

- **All-Natural**
  The only processing to ICE SLICER is crushing and sizing to the proper grade.

- **Safer for Metal**
  70% less corrosive than salt on mild steel.

- **Safer for Concrete**
  Won’t chemically attack concrete and reduces freeze/thaw damage.

Minimizing damage to vegetation, roadways, sidewalks, curbs, automobiles, bridge decks, etc. makes ICE SLICER one of the least costly deicer options available..
Less Corrosive to Metals & Concrete

- ICE SLICER contains 1/60 the alkali content found in lake salt
- Many of the trace minerals act as natural corrosion inhibitors
- The presence of materials like magnesium chloride reduce the number of freeze/thaw cycles
Provides Traction & Melting

- Each granule contains minerals that work at varying speeds
- Immediate effect from fast-reacting minerals
- Time-release effect from slower-reacting minerals
ICE SLICER’s Effect on Waterways and Vegetation

**Waterways**
- Decreased application rates = Fewer chlorides
- Decreased risk of chloride contamination to waterways.

**Roadside Vegetation**
- Decreased application rates = less impact on vegetation
- Stop replacing shrubs and grass near treated walkways.

Biological/Chemical Oxygen Demand = 0
Keeping Highways Open

How does IceSlicer help keep the highways open?

• IceSlicer penetrates more effectively through snow and ice.
• IceSlicer melts effectively even at 0º, allowing you to combat colder storms.
• Using less product means you cover more lane miles per load.
• IceSlicer is dense, so it stays on the road better and longer than salt or sand.
• Iceslicer was the product of choice for the 2002 Olympics in Salt Lake City.
• The Olympic Committee purchased Iceslicer and placed it in the UDOT Maintenance sheds for them to use to insure the roads were open and safe at each venue.
• They could have chosen any product, but we are proud they chose Iceslicer which performed beyond their expectations.
Performance Photos

Testing in California
Dec.25, 04

Equal applications
Maple Grove Test Site 1-6-04
Iceslicer (RS) and Kansas (KS) Salt
Ambient Temp: 35 deg F
Plowed the road first Then applied 1 mile RS and 1 Mile Kansas
App Rate: 200#/lane mile

Testing in Sevier Co. 2003
Maple Grove Test Site 1-12-04
RS vs KS Salt
Observation only from test of 1/6/04

Testing in Sevier Co. 2003
Huntsville Mar. 3, 2004

Iceslicer Residual from previous application.
Any Questions?

Terry Crowther  
Redmond Minerals  
475 West 910 South  
Heber City, Utah 84032  
1-888-264-7258  
1-801-362-5224