



## Meltdown 20 Granular De-Icer Spec Sheet



### **MELTDOWN 20 GRANULAR ICE-MELT**

Contains a **blend of naturally occurring Complex Chloride** (TM) ice-melter, Magnesium Chloride Hexahydrate, and a corrosion inhibitor. Meltdown 20's complex chlorides are extracted from ancient buried mineral deposits in central Utah, which have been protected from the buildup of alkalis and pollutants. The magnesium chloride in Meltdown 20 is a **very low corrosive ice-melter** and comes from the environmentally friendly process of solar evaporation of salt water. These all-natural products are combined with a unique corrosion inhibitor to create a special, premium grade, very low corrosion ice-melter. Meltdown 20 is safer for use on concrete and metal, less harmful to landscaping and vegetation, and safe for use around animals.

#### **Directions for Use:**

For best results, remove any existing loose snow and slush from driveways, steps and walkways prior to application of ice-melt. Evenly sprinkle Meltdown 20 on desired surfaces. Melting should begin immediately. Once ice and snow have sufficiently melted, shovel off slush. Thick accumulation requires additional application. Meltdown 20 may also be kept in cars and trucks for use any time traction is needed.

#### **Function**

Meltdown 20 draws moisture from the ice, snow and air to form a melting brine that breaks the bond between ice, snow and the road surface. The magnesium chloride portion immediately begins aggressively melting the ice while the percentage of red complex chloride acts as an abrasive and a slower melting agent, providing a fast-acting ice and snow fighting solution with longevity.

#### **Location**

On bridges, overpasses, streets, parking lots and sidewalks at places such as highways, hospitals, schools, fire stations, etc.

<b>Application</b>	Use any size spreader that has the capability to apply or to be modified to apply at a rate of 100-150 lbs per lane mile. Use 1 cup per square yard for sidewalks and other small applications. <b><i>Hand-operated fertilizer spreaders are ideal for these smaller applications.</i></b>
<b>Efficiency</b>	100-150 lb per lane mile spread rate of Meltdown 20 vs. 500-1000 lbs per lane mile using salt/sand translates into a greater number of roads being treated much faster, resulting in a higher degree of safety and efficiency.
<b>Aesthetics</b>	<b>UNIQUE COLOR ENHANCES PERFORMANCE!</b> The unique color of Meltdown 20 serves as a guide to where and how much has been applied. Usage is generally half as much and half as often as compared with other de-icers. The reddish color absorbs heat from the sun on cold sunny days to help the melting process. <b><i>The natural grit in this product helps provide instant traction.</i></b>
<b>Gradation</b>	A varied gradation ranging from small granules, which begin melting immediately, to 1/4 inch size particles that melt slower while creating a fast-acting product with longevity.
<b>Leaching</b>	Meltdown 20 is slightly moist, but with absolutely no leaching from the stockpile.
<b>Coverage</b>	The moistness promotes adhesion to the road surface, drastically reducing bounce and scatter.
<b>Caking</b>	Meltdown 20 is free flowing with no caking.
<b>Eutectic Point</b>	Meltdown 20 is effective down to 0 F.
<b>Spalling</b>	The magnesium chloride in the Meltdown 20 is an anti-spalling agent to concrete. Due to the low eutectic point of -10 F (the lowest temperature at which the material will melt ice), the number of freeze-thaw cycles while using Meltdown 20 is drastically reduced over those of typical road salt, which has a eutectic point of approximately +25 F. The lower eutectic point combined with the need for less material leads to less scaling and spalling.
<b>Corrosion</b>	75% less corrosive than salt as tested by TXDOT.
<b>Clean-Up</b>	When adhering to proper spread rates, Meltdown 20 dissipates after usage, virtually eliminating costly clean-up.
<b>Packaging</b>	One pallet = 50 x 50 lb bags (2500 lbs).



**NOTICE:**

Do not use on concrete that is less than one year old, or that was not properly mixed, finished, or cured. Flaking or spalling may occur when using any ice-melting product on concrete surfaces, especially those that are poorly constructed, contain porous concrete or act as mortar joints between bricks and flagstone. When used in these situations, Meltdown 20 should cause less damage than most other de-icers and will reduce the number of concrete freeze/thaw cycles, which also greatly contributes to concrete damage.

**Contains:**

Unique source of reddish Complex Chlorides (TM) (sodium, calcium, potassium, and magnesium chlorides) with beneficial trace minerals, magnesium chloride hexahydrate, and a corrosion inhibitor.

	CAS. NO.
NaCl.....	007647-14-5
MgCl <sub>2</sub> (6H <sub>2</sub> O).....	007791-18-6
CaCl <sub>2</sub> .....	010043-52-4
KCl.....	007447-40-7
MgCl <sub>2</sub> .....	007786-30-3

*Meltdown 20 is available through*  
**The Green Chemical Store, Inc. in Dallas, TX**  
 Call **972-429-1719**  
 or visit [www.thegreenchemicalstore.com](http://www.thegreenchemicalstore.com)



# Meltdown 20 SDS

## 1. PRODUCT AND COMPANY IDENTIFICATION

Product Identity: Meltdown 20

Chemical Name: Complex Chloride – Sodium Chloride, Potassium Chloride, Magnesium Chloride, Calcium Chloride with corrosion inhibition

Recommended use of the chemical and restrictions on use: Anti-icing and de-icing

Distributor: The Green Chemical Store Inc.  
Dallas TX 75243

Telephone: 972-429-1719

Emergency Phone: CHEMTREC: (800) 424-9300

SDS Date of Preparation: 5/15/2014

## 2. HAZARDS IDENTIFICATION

### GHS Classification:

Physical	Health	Environment
Not Hazardous	Not Hazardous	Not Hazardous

### GHS Label Elements:

None Required

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS No.	Amount
Sodium Chloride	7647-14-5	90-98%
Magnesium Chloride	7791-18-6	0.06-0.20%
Potassium Chloride	7447-40-7	0.30-0.20%
Calcium Chloride	10043-52-4	0.30-1.40%
Corrosion Inhibitor	Proprietary	Proprietary

**4. FIRST AID MEASURES**

**Eye:** Flush victim's eyes with water, while holding the eyelids apart. Get medical attention if irritation occurs and persists.

**Skin:** Wash skin thoroughly with soap and water. Get medical attention if irritation develops. Remove and launder clothing before reuse.

**Ingestion:** Do not induce vomiting unless directed to do so by a medical professional. Rinse mouth with water and give one glass of water to drink. Get medical attention if symptoms develop.

**Inhalation:** If symptoms occur, remove victim to fresh air. If breathing is difficult or irritation persists, get medical attention.

**Most important Symptoms:** May cause slight eye irritation. Dust may cause slight respiratory tract irritation.

**Indication of immediate medical attention/special treatment:** Immediate medical attention is not required.

**5. FIRE FIGHTING MEASURES**

**Suitable (and Unsuitable) Extinguishing Media:** Use media appropriate for surrounding fire.

**Specific hazards arising from the chemical:** Thermal decomposition may yield hydrogen chloride, halogenated compounds, and chlorine gas.

**Special Protective Equipment and Precautions for Fire-Fighting Instructions:** Firefighters should wear positive pressure self-contained breathing apparatus and full protective clothing. Aqueous solutions may cause surfaces to be extremely slippery and cause a slip hazard.

**6. ACCIDENTAL RELEASE MEASURES**

**Personal Precautions, Protective Equipment, and Emergency Procedures:** Wear appropriate protective clothing as described in Section 8. Wash thoroughly after handling.

**Methods and Materials for Containment and Cleaning Up:** Sweep up material and collect in a suitable container for disposal. Flush spill area with water. Report releases as required by local, state, and federal authorities.

**7. HANDLING AND STORAGE**

**Precautions for Safe Handling:** Avoid contact with the eyes, skin, and clothing. Avoid breathing dusts. Wear protective clothing and equipment as described in Section 8. Wash thoroughly with soap and water after handling. Keep containers closed when not in use.

**Conditions for Safe Storage, Including Any Incompatibilities:** Store in a cool, dry, well-ventilated area away from incompatible materials. Product may be corrosive to some metals.

<b>8. EXPOSURE CONTROLS/PERSONAL PROTECTION</b>
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**Exposure Guidelines:**

Sodium Chloride	None Established
Magnesium Chloride	None Established
Potassium Chloride	None Established
Calcium Chloride	None Established
Corrosion Inhibitor	None Established

**Engineering Controls:** Use with adequate general ventilation to minimize exposures.

**Respiratory Protection:** In operations where exposure levels are excessive, a NIOSH approved respirator with dust cartridges or supplied air respirator appropriate for the form and concentration of the contaminants should be used. Selection and use of respiratory equipment must be in accordance with OSHA 1910.134 and good industrial hygiene practice.

**Skin Protection:** Wear impervious gloves such as rubber or neoprene if needed to avoid prolonged skin contact.

**Eye Protection:** Safety glasses recommended.

**Other:** Long-sleeved clothing and long pants recommended to avoid prolonged skin contact. Suitable washing facilities should be available in the work area.

<b>9. PHYSICAL AND CHEMICAL PROPERTIES</b>
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**Appearance And Odor:** Reddish to white solid with no odor.

<b>Physical State:</b> Solid	<b>Odor Threshold:</b> Not established
<b>Vapor Density:</b> Not determined	<b>Initial Boiling Point/Range:</b> Not established
<b>Solubility In Water:</b> 92-99%	<b>Vapor Pressure:</b> Not determined
<b>Relative Density:</b> Not determined	<b>Evaporation Rate:</b> Not determined
<b>Melting/Freezing Point:</b> Not determined	<b>pH:</b> 4-9
<b>VOC Content:</b> Not determined	<b>Octanol/Water Coefficient:</b> Not determined
<b>Solubility (other):</b> Not determined	<b>Decomposition Temperature:</b> Not determined
<b>Viscosity:</b> Not applicable	<b>Flammability (solid, gas):</b> Not flammable
<b>Flashpoint:</b> Not applicable	<b>Autoignition Temperature:</b> Not determined
<b>Flammable Limits: LEL:</b> Not determined	<b>UEL:</b> Not determined

<b>10. STABILITY AND REACTIVITY</b>
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**Reactivity:** Not normally reactive

**Chemical Stability:** Stable under normal storage and handling conditions.

**Possibility of Hazardous Reactions:** None known.

**Conditions to Avoid:** None known.

**Incompatible Materials:** Strong oxidizing agents, concentrated acids, and some metals.

**Hazardous Decomposition Products:** When heated to decomposition emits hydrogen chloride, halogenated compounds, and chlorine gas.

**11. TOXICOLOGICAL INFORMATION****HEALTH HAZARDS:**

**Ingestion:** Ingestion may cause slight irritation.

**Inhalation:** Inhalation of dusts may cause slight irritation of the nose, throat, and upper respiratory tract.

**Eye:** May cause slight irritation.

**Skin:** May cause slight irritation on prolonged or repeated contact.

**Sensitization:** This material is not known to cause sensitization.

**Chronic:** None known.

**Carcinogenicity:** None of the components is listed as a carcinogen or suspected carcinogen by IARC, NTP, or OSHA.

**Germ Cell Mutagenicity:** None currently known.

**Reproductive Toxicity:** None currently known.

**Numerical Measures of Toxicity:**

No toxicity data available

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity:** No data available

**Persistence and Degradability:** Biodegradation is not applicable to inorganic substances.

**Bioaccumulative Potential:** No data available

**Mobility in Soil:** No data available

**Other Adverse Effects:** None known

**13. DISPOSAL CONSIDERATIONS**

Dispose in accordance with local, state, and federal environmental regulations.

**14. TRANSPORT INFORMATION****DOT Hazardous Materials Description:**

Proper Shipping Name: Not regulated

UN Number: None

Hazard Class/Packing Group: None

Labels Required: None

**15. REGULATORY INFORMATION**

**CERCLA:** This product is not subject to CERCLA release reporting. Many states have more stringent release reporting requirements. Report spills required under federal, state, and local regulations.

**SARA Hazard Category (311/312):** Not Hazardous

**SARA 313:** This product contains the following chemicals subject to Annual Release Reporting Requirements under SARA Title III, Section 313 (40 CFR 372): None

**EPA TSCA Inventory:** All of the ingredients in this product are listed on the EPA TSCA Inventory.

**CANADA:**

This product has been classified under the CPR and this MSDS discloses information elements required by the CPR.

**Canadian CEPA:** All the components of this product are listed on the Canadian DSL.

**Canadian WHMIS Classification:** Not classified as dangerous

**16. OTHER INFORMATION**

**NFPA Rating:** Health = 0

Flammability = 0

Instability = 0

**HMIS Rating:** Health = 1

Flammability = 0

Physical Hazard = 0

SDS Revision History:

5/15/2014: New SDS

**Disclaimer:** *This Safety Data Sheet (SDS) is provided in response to customer requests to address the safe handling of the product. All statements, technical information and recommendations contained herein are the best of our knowledge, reliable and accurate. This SDS is not intended to make any representation as to how the product will perform when used for its intended purpose by a user. In that regards the product is sold "AS IS" and nothing in this SDS should be deemed to be a representation or warranty of any injury, loss, or damage, of any kind or nature, which are sustained by or arise from the use of the product. Nothing in this SDS is intended to be a representation or warranty by the manufacturer of the accuracy, safety, or usefulness for any purpose of any technical information, materials, techniques, or practices.*

*The information contained in this Safety Data Sheet is, to the best of our knowledge, accurate and reliable. This information should be provided to all individuals handling this product. Federal, state, and local regulations should be followed when handling this product.*