

Product Name:	<u>Liquid De-Icer and Anti-Icer</u>	Product Number:	<u>GRN-660</u>
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MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Material Name	GOOD EARTH PRODUCTS LIQUID DE-ICER AND ANTI-ICER
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Company Information:	Missouri Vocational Enterprises
Missouri Vocational Enterprises:	P.O. Box 1898
1717 Industrial Drive	Jefferson City, MO 65102
General Information: 800 392-8486	

Telephone Numbers for 24 Hours Emergency Assistance		
INFOTRAC	For Emergencies	1-800-535-5053

2. Composition / Information on Ingredients

Components:	% By Wt.	
Calcium Chloride (CAS # 010043-52-4)	25-30%	
Magnesium Chloride (CAS # 007791-18-6)	2-4%	
Urea	2-8%	
Corrosion Inhibitors and Anti-spalling agent	2-10%	
Water	60-70%	

3. Hazards Identification

Appearance & Odor:	Clear to amber color.
Eyes:	May cause severe irritation with corneal injury. Effects may be slow to heal.
Skin:	Prolonged or repeated exposure may cause skin irritation, even a burn.
Ingestion:	Ingestion may cause gastrointestinal irritation or ulceration.
Inhalation:	Mists may cause irritation to upper respiratory tract.

4. First Aid Measures

Eyes:	Irrigate with flowing water immediately and continuously for at least 15 minutes. Contact medical personnel (if required).
Skin:	Wash off in flowing water or shower.
Inhalation:	Remove to fresh air if effects occur. Consult a physician.
Ingestion:	Do not induce vomiting. Give large amounts of milk or water if available and transport to medical facility.
General Advice:	If you feel unwell, seek medical advice (show the label where possible).

5. Fire Fighting Measures

Extinguishing Media Suitable extinguishing media	
Flammable Properties:	Not Applicable
Hazardous Composition Products:	Not Applicable.
Extinguishing Media:	This material does not burn.
Fire Fighting Instruction:	Keep people away. Isolate fire and deny any unnecessary entry.
Protective Equipment For Fire Fighters:	Wear self-contained breathing apparatus and full protective fire fighting equipment.

6. Accidental Release Measures

Protect People: Isolate area. Avoid contact with eyes and skin. Wash exposed body areas thoroughly after handling.
Protect The Environment: Small Spills: Are not expected to be harmful to the environment. Large Spills: Are not expected to be harmful to the environment.
Methods for Containment: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Prevent entry into waterways, sewers, basements or confined areas.
Clean up: Small Spills: Contain spill if possible. Absorb with materials such as sand. Collect material in suitable and properly labeled containers. Flush residue with plenty of water. Large Spills: Dike and transfer to suitable and properly labeled containers. Absorb with material such as sand. Flush residue with plenty of water

7. Handling and Storage

Handling:	Use of specific items such as gloves, boots, apron, or other, will depend on each operation.
Respiratory Protection	When respiratory protection is required for certain operations, use an approved air-purifying respirator.

8. Physical & Chemical Properties

Appearance: Clear, Amber liquid	Crystallization Temp: -45 °C
Odor: None	Vapor Density: Not Available
Vapor Pressure: 7 – 15 mmHg @ 25C, 77F	Specific Gravity: 1.332-1.335 @
Boiling Point 122° C	Solubility (water): Completely miscible

9. Chemical Stability & Reactivity Information

Chemical stability: Stable. Hygroscopic.	Hazardous decomposition products: Does not decompose.
Conditions to avoid: Temperatures above >350F	Possibility of hazardous reactions: Will not occur.
Incompatible materials: Attack aluminum / Yellow brass; react with sulfuric acid and zinc.	

10. Toxicological Information

Acute: Skin: The LD50 for skin absorption in rabbits is >5000 mg/kg.
Ingestion: The oral LD50 for rats is in the range of 900 – 2100 mg/kg.
Mutagenicity: For CaCl ₂ in vitro mutagenicity studies were negative.

11. Ecological Information

Ecotoxicity: Based largely or completely on data for major component(s), material is practically non-toxic to aquatic organisms on an acute basis (LC50 greater than 100 mg/L in most sensitive species).
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12. Disposal Considerations

Disposal Instructions: Do not dump into any sewers, on the ground, or into any body of water. All disposals must be in compliance with all Federal, State/Provincial and local laws and regulations.

13. Transportation Information

DOT Not regulated as hazardous goods.	IATA Not regulated as hazardous goods.
DOT Requirement NON-BULK Not Regulated as hazardous goods.	IMDG Not regulated as hazardous goods.

14. Regulatory Information

The Canadian Workplace Hazardous Material Information System (WHMIS) Classification for this product is: D2B – eye and skin irritant.

15. Other Information

Disclaimer: The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release.

While seller believes that the information contained herein is accurate, such information is offered solely for its customers' consideration and verification under their specific use conditions. This information is not to be deemed a warranty or representation of any kind for which Seller assumes legal responsibility.

Date: November 5, 2013