

3/10/06 KY

CRYOTECH CMA® MATERIAL SAFETY DATA SHEET



1. PRODUCT NAME & DESCRIPTION

Cryotech CMA® Deicer

MANUFACTURED AND SUPPLIED IN THE USA BY

Cryotech Deicing Technology
6103 Orthoway
Fort Madison, IA 52627
United States

Cryotech Contact Information

Telephone: (800)346-7237
FAX: (319)372-2662
email: deicers@cryotech.com
website: <http://www.cryotech.com>

2. CHEMICAL COMPOSITION

The percent compositions are given to allow for the various ranges of the components present in the whole product and may not equal 100%.

Percent	Component	CAS#
100%	Cryotech CMA® Deicer	
Containing		
96%	Hydrated Calcium Magnesium and other acetates	76123-46-1
<4.0%	Water-insoluble material	

CAS - Chemical Abstract Service Number

3. HAZARD IDENTIFICATION

(also see Sections 11 and 12)

CAUTION! - MAY CAUSE EYE IRRITATION

EYE CONTACT:

This substance is not expected to cause prolonged or significant eye irritation

SKIN IRRITATION:

This substance is not expected to cause prolonged or significant skin irritation

DERMAL TOXICITY:

If absorbed through the skin, this substance is considered practically non-toxic to internal organs.

RESPIRATORY/INHALATION:

If inhaled, this substance is considered practically non-toxic to internal organs.

INGESTION:

If swallowed, this substance is considered practically non-toxic to internal organs.

OCCUPATIONAL EXPOSURE LIMITS:

None established per OSHA, PEL and ACGIHLV (TWA)

4. FIRST AID MEASURES

Chemical Emergency: Spill, leak, fire, or accident call

Chemtrec day or night (800)424-9300;

Outside continental USA call (703)527-3887

EYE CONTACT:

No first aid procedures are required. However, as a precaution flush eyes with fresh water for 15 minutes. Remove contact lenses if worn.

SKIN CONTACT:

No first aid procedures are required. As a precaution, wash skin thoroughly with soap and water. Remove and wash contaminated clothing.

INHALATION: Since this material is not expected to be an immediate inhalation problem, no first aid procedures are required.

INGESTION:

If swallowed, give water or milk to drink and telephone for medical advice.

Consult medical personnel before inducing vomiting. If medical advice cannot be obtained, then take the person and product container to the nearest medical emergency treatment center or hospital.

5. FIRE FIGHTING MEASURES

FLASH POINT: Not applicable

AUTO IGNITION: No data available

FLAMMABILITY LIMITS (% by volume in air):

Lower: No data available

Upper: No data available

EXTINGUISHING MEDIA:

Material does not burn.

FIRE FIGHTING PROCEDURES:

This material will not burn.

COMBUSTION PRODUCTS:

None

NFPA RATINGS:

Health 0; Flammability 0; Reactivity 0; Special NDA:

HMIS RATINGS:

Health 0; Flammability 0; Reactivity 0; Special NDA:

(Least - 0, Slight - 1, Moderate - 2, High - 3, Extreme - 4)

These values are obtained using the guidelines or published evaluations prepared by the National Fire Protection Association (NFPA) or the National Paint Coating Association.

6. ACCIDENTAL RELEASE MEASURES

Chemical Emergency: Spill, leak, fire, or accident call

Outside continental USA call (703)527-3887

Chemtrec day or night (800)424-9300;

Sweep up spills and transfer to a container for disposal. See section 13.

If needed, wash spillage area with plenty of water.

7. HANDLING AND STORAGE

Avoid contact with skin and eyes.

Do not store or handle product with systems constructed of parts that have galvanized steel, zinc or brass components.

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<p>8. EXPOSURE CONTROLS/PERSONAL PROTECTION</p> <p>EYE PROTECTION: No special eye protection is usually necessary.</p> <p>SKIN PROTECTION: No special skin protection is usually necessary.</p> <p>RESPIRATORY PROTECTION: No special respiratory protection is normally required. However, if operating conditions create high airborne concentrations, the use of an approved respirator is recommended.</p> <p>VENTILATION: No special ventilation is necessary. However, if operating conditions create high airborne concentrations of this material, special ventilation may be needed.</p>	<p>13. DISPOSAL CONSIDERATION Based on information available to Cryotech Deicing Technology, this product is neither listed as a hazardous waste nor does it exhibit any of the characteristics that would cause it to be classified or disposed of as an RCRA hazardous waste. If product should spill or be otherwise unsuitable for normal deicing applications, it may be absorbed on suitable materials and disposed of in sanitary landfill unless state or local regulations prohibit such disposal.</p>																																						
<p>9. PHYSICAL AND CHEMICAL PROPERTIES</p> <p>SOLUBILITY: Partially soluble in water.</p> <p>Appearance: White to off-white spherical granule</p> <p>BOILING POINT: NA</p> <p>MELTING POINT: NA</p> <p>EVAPORATION: NA</p> <p>SPECIFIC GRAVITY: 1.2 min</p> <p>VAPOR PRESSURE: No data available</p> <p>PERCENT VOLATILE (VOLUME %): No data available</p> <p>VAPOR DENSITY (AIR = 1): No data available</p> <p>pH: 8-10</p>	<p>14. TRANSPORT INFORMATION Not restricted under any transport regulations.</p> <p>15. REGULATORY INFORMATION</p> <p>DOT SHIPPING NAME: Not designated as a hazardous material by the Federal DOT.</p> <p>DOT HAZARD CLASS: Not Applicable</p> <p>DOT IDENTIFICATION NUMBER: Not Applicable</p> <p>SARA 311 CATEGORIES:</p> <table border="0"> <tr> <td>1. Immediate (Acute) Health Effects:</td> <td>Yes</td> </tr> <tr> <td>2. Delayed (Chronic) Health Effects:</td> <td>No</td> </tr> <tr> <td>3. Fire Hazard:</td> <td>No</td> </tr> <tr> <td>4. Sudden Release of Pressure Hazard:</td> <td>No</td> </tr> <tr> <td>5. Reactivity Hazard:</td> <td>No</td> </tr> </table> <p>REGULATORY LISTS SEARCHED:</p> <table border="0"> <tr> <td>01 = SARA 313</td> <td>02 = MASS RTK</td> </tr> <tr> <td>03 = NTP Carcinogen</td> <td>04 = CA Prop. 65</td> </tr> <tr> <td>05 = MI 406</td> <td>06 = IARC Group 1</td> </tr> <tr> <td>07 = IARC Group 2A</td> <td>08 = IARC Group 2B</td> </tr> <tr> <td>09 = SARA 302/304</td> <td>10 = PA RTK</td> </tr> <tr> <td>11 = NJ RTK</td> <td>12 = CERCLA 302.4</td> </tr> <tr> <td>13 = MN RTK</td> <td>14 = ACGIH TLV</td> </tr> <tr> <td>15 = ACGIH STEL</td> <td>16 = ACGIH Calculated TLV</td> </tr> <tr> <td>17 = OSHATWA</td> <td>18 = OSHA STEL</td> </tr> <tr> <td>20 = EPA Carcinogen</td> <td>21 = TSCA Sect 4(e)</td> </tr> <tr> <td>22 = TSCA Sect 5(a)(e)(f)</td> <td>23 = TSCA Sect 6</td> </tr> <tr> <td>24 = TSCA Sect 12(b)</td> <td>25 = TSCA Sect 8(a)</td> </tr> <tr> <td>26 = TSCA Sect 8(d)</td> <td>28 = Canadian WHMIS</td> </tr> <tr> <td>29 = OSHA CEILING</td> <td></td> </tr> </table> <p>None of the components of this material are found on the regulatory lists indicated.</p>	1. Immediate (Acute) Health Effects:	Yes	2. Delayed (Chronic) Health Effects:	No	3. Fire Hazard:	No	4. Sudden Release of Pressure Hazard:	No	5. Reactivity Hazard:	No	01 = SARA 313	02 = MASS RTK	03 = NTP Carcinogen	04 = CA Prop. 65	05 = MI 406	06 = IARC Group 1	07 = IARC Group 2A	08 = IARC Group 2B	09 = SARA 302/304	10 = PA RTK	11 = NJ RTK	12 = CERCLA 302.4	13 = MN RTK	14 = ACGIH TLV	15 = ACGIH STEL	16 = ACGIH Calculated TLV	17 = OSHATWA	18 = OSHA STEL	20 = EPA Carcinogen	21 = TSCA Sect 4(e)	22 = TSCA Sect 5(a)(e)(f)	23 = TSCA Sect 6	24 = TSCA Sect 12(b)	25 = TSCA Sect 8(a)	26 = TSCA Sect 8(d)	28 = Canadian WHMIS	29 = OSHA CEILING	
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<p>10. STABILITY & REACTIVITY</p> <p>HAZARDOUS DECOMPOSITION PRODUCTS: Not applicable</p> <p>STABILITY: Stable.</p> <p>HAZARDOUS POLYMERIZATION: Polymerization will not occur.</p> <p>INCOMPATIBILITY: None</p> <p>SPECIAL PRECAUTIONS: READ AND OBSERVE ALL PRECAUTIONS ON PRODUCT LABEL.</p>	<p>16. OTHER INFORMATION</p> <p>ADDITIONAL HEALTH DATA COMMENT: Effects of overexposure: High concentration of dust may cause irritation of eyes, nose and throat, especially for people with chronic respiratory problems. This Material Safety Data Sheet contains environmental, health and toxicology information for your employees. Please make sure this information is given to them. It also contains information to help you meet community right-to-know/emergency response reporting requirements under SARA Title III and many other laws. If you resell this product, this MSDS must be given to the buyer or the information incorporated in your MSDS. Discard any previous edition of this MSDS. Latest version of this MSDS can be found at http://www.cryotech.com</p>																																						
<p>11. TOXICOLOGICAL INFORMATION</p> <p>EYE IRRITATION: The Draize Eye Irritation Score (range, 0-110) in rabbits is 8.7</p> <p>SKIN IRRITATION: The Draize Skin Primary Irritation Score (range, 0-8) for a 4-hour exposure (rabbits) is 0.1. This material was not a skin sensitizer in the Buehler Guinea Pig Sensitization Test.</p> <p>DERMAL TOXICITY: The dermal LD50 in rabbits is >5.0 g/kg</p> <p>RESPIRATORY/INHALATION: The 4-hour inhalation LC50 in rats is 4.6 mg/liter</p> <p>INGESTION: The oral LD50 in rats is greater than 5000 mg/liter. Additional Toxicological Data: The 96-hour LC50 in rainbow trout (<i>Salmo gairdneri</i>) is >1000 mg/L. The 48-hour LC50 daphnia (<i>Daphnia magna</i>) is >1000 mg/L. Results of a 28-day oral toxicity study in rats showed that daily doses of 1000 mg/kg of Cryotech CMA Deicer caused no significant toxicity.</p>	<p>12. ECOLOGICAL INFORMATION</p> <p>COD (TOD): 0.75 g O₂/g</p> <p>BOD₂₀ @ 2° C: 0.40 g O₂/g</p> <p>BOD₂₀ @ 10° C: 0.67 g O₂/g</p>																																						

The above information is accurate to the best of our knowledge. However, since data, safety standards, and government regulations are subject to change and the conditions of handling and use or misuse are beyond our control, **Cryotech Deicing Technology, a Division of General Atomics International Services Corporation makes no warranty, either express or implied, with respect to the completeness or continuing accuracy of the information contained herein and disclaims all liability for reliance thereon.** Cryotech Deicing Technology, a Division of General Atomics International Services Corporation assumes no responsibility for any injury or loss resulting from the use of the product described herein. User should satisfy himself that he has all current data relevant to his particular use.