



# CRYOTECH CMA<sup>®</sup> MATERIAL SAFETY DATA SHEET

## 1. PRODUCT NAME & DESCRIPTION

**CRYOTECH CMA<sup>®</sup>** Solid Commercial 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](mailto: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 <sup>®</sup> Solid Commercial Deicer	
<b>CONTAINING</b>		
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. Dust, in high concentration, may cause irritation of eyes, nose and throat.

#### INGESTION:

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

#### OCCUPATIONAL EXPOSURE LIMITS:

None Identified

## 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

Non-flammable

#### EXTINGUISHING MEDIA:

Use extinguishing media appropriate for surrounding fire.

#### FIRE FIGHTING PROCEDURES:

Fire fighters should wear proper protective equipment, self-contained breathing apparatus with full face piece operated in positive pressure mode.

#### COMBUSTION PRODUCTS:

Normal combustion forms carbon dioxide and water.

#### NFPA RATINGS:

**Health 1; 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  
Chemtrec day or night (800)424-9300;  
Outside continental USA call (703)527-3887

#### SPI LL/ LEAK PRECAUTIONS:

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

#### STORAGE:

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

#### SPECIAL PRECAUTIONS:

Avoid contact with skin and eyes.

## 8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

#### EYE PROTECTION:

Wear eye protection if exposure is possible

#### SKIN PROTECTION:

No special skin protection is usually necessary. Avoid prolonged or frequently repeated skin contact with this material. Skin contact may be minimized by wearing protective clothing.

#### RESPIRATORY PROTECTION:

No special respiratory protection is normally required where adequate ventilation exists. However, if operating conditions create high airborne concentrations, the use of an approved respirator is recommended.

#### VENTILATION:

No special ventilation is necessary. However, if operating conditions create high airborne concentrations of this material, special ventilation may be needed.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

#### APPEARANCE:

White to off-white spherical pellet.

#### pH (20°C):

8-10 (10% aqueous solution)

#### SPECIFIC GRAVITY:

1.2 min

#### MELTING POINT:

No data available

#### SOLUBILITY:

Partially soluble in water.



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<p><b>10. STABILITY &amp; REACTIVITY</b></p> <p><b>HAZARDOUS DECOMPOSITION PRODUCTS:</b> Not applicable</p> <p><b>STABILITY:</b> Stable</p> <p><b>HAZARDOUS POLYMERIZATION:</b> Polymerization will not occur.</p> <p><b>INCOMPATIBILITY:</b> None</p> <p><b>SPECIAL PRECAUTIONS:</b> READ AND OBSERVE ALL PRECAUTIONS ON PRODUCT LABEL. KEEP CONTAINER TIGHTLY CLOSED IN ANY GENERAL CHEMICAL STORAGE AREA.</p>	<p><b>14. TRANSPORT INFORMATION</b></p> <p>Not restricted under any transport regulations.</p>										
<p><b>11. TOXICOLOGICAL INFORMATION</b></p> <p><b>EYE IRRITATION:</b> The Draize Eye Irritation Score (range, 0-110) in rabbits is 8.7.</p> <p><b>SKIN IRRITATION:</b> The Draize Skin Primary Irritation Score (range, 0-8) for a 4-hour exposure (rabbits) is 0.1.</p> <p>This material was not a skin sensitizer in the Buehler Guinea Pig Sensitization Test.</p> <p><b>DERMAL TOXICITY:</b> The dermal LD50 in rabbits is &gt; 5.0 g/kg.</p> <p><b>RESPIRATORY/ INHALATION:</b> The 4-hour inhalation LC50 in rats is 4.6 mg/liter.</p> <p><b>INGESTION:</b> 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 &gt; 1000 mg/L. The 48-hour LC50 daphnia (<i>Daphnia magna</i>) is &gt; 1000 mg/L. Results of a 28-day oral toxicity study in rats showed that daily doses of 1000 mg/kg of Cryotech CMA Deicing caused no significant toxicity.</p>	<p><b>15. REGULATORY INFORMATION</b></p> <p><b>ALL OF THE COMPONENTS IN THIS PRODUCT ARE ON THE FOLLOWING INVENTORY LISTS:</b> U.S.A. (TSCA) Europe (EINECS) Canada (DSL/NDSL)</p> <p><b>TSCA SECTION 12(b):</b> None of the components in this product are regulated under TSCA Section 12(b).</p> <p><b>OSHA HAZARD CLASSIFICATION:</b> Hazardous Chemical (Irritant); None of the components in this product are considered highly hazardous by OSHA.</p> <p><b>CERCLA HAZARDOUS SUBSTANCES:</b> There is no CERCLA Reportable Quantity for this material.</p> <p><b>SARA 311 CATEGORIES:</b></p> <table border="0"><tr><td>Immediate (Acute) Health Hazard:</td><td>Yes</td></tr><tr><td>Delayed (Chronic) Health Hazard:</td><td>No</td></tr><tr><td>Fire Hazard:</td><td>No</td></tr><tr><td>Sudden Release of Pressure Hazard:</td><td>No</td></tr><tr><td>Reactivity Hazard:</td><td>No</td></tr></table> <p><b>SARA 313:</b> None of the components in this product are subject to reporting under SARA Section 313.</p> <p><b>CLEAN WATER ACT:</b> None of the components in this product are listed as Priority Pollutants under the CWA. None of the components in this product are listed as Toxic Pollutants under the CWA.</p> <p><b>STATE RIGHT-TO-KNOW:</b> This product does not contain components at levels which are required to be reported under the statutes of the following states: PA, MA, NJ This product does not contain components known to the State of California (Proposition 65) to cause cancer and/or reproductive harm at levels which would require a warning under the statute.</p> <p><b>WHMIS (Canada) CLASSIFICATION:</b> Not controlled</p>	Immediate (Acute) Health Hazard:	Yes	Delayed (Chronic) Health Hazard:	No	Fire Hazard:	No	Sudden Release of Pressure Hazard:	No	Reactivity Hazard:	No
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<p><b>12. ECOLOGICAL INFORMATION</b></p> <table border="0"><tr><td>COD (TOD):</td><td>0.75 kg O<sub>2</sub>/kg</td></tr><tr><td>BOD<sub>20</sub> @ 2° C:</td><td>0.40 kg O<sub>2</sub>/kg</td></tr><tr><td>BOD<sub>20</sub> @ 10° C:</td><td>0.67 kg O<sub>2</sub>/kg</td></tr></table>	COD (TOD):	0.75 kg O <sub>2</sub> /kg	BOD <sub>20</sub> @ 2° C:	0.40 kg O <sub>2</sub> /kg	BOD <sub>20</sub> @ 10° C:	0.67 kg O <sub>2</sub> /kg	<p><b>16. OTHER INFORMATION</b></p> <p><b>ADDITIONAL HEALTH DATA COMMENT:</b> 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.</p> <p><b>Latest version of this MSDS can be found at <a href="http://www.cryotech.com">http://www.cryotech.com</a>.</b></p>				
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<p><b>13. DISPOSAL CONSIDERATION</b></p> <p>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>											

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.