



CRYOTECH CMA40® MATERIAL SAFETY DATA SHEET

1. PRODUCT NAME & DESCRIPTION

CRYOTECH CMA40® 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
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 CMA40® Solid Commercial Deicer	
CONTAINING		
40%	Cryotech CMA® Solid Commercial Deicer	76123-46-1
60%	Sodium Chloride	7647-14-5

CAS - Chemical Abstract Service Number

3. HAZARD IDENTIFICATION

(also see Sections 11 and 12)

CAUTION! - MAY CAUSE EYE IRRITATION

EYE CONTACT:

This substance may cause eye irritation.

SKIN IRRITATION:

This substance may cause 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. Ingestion may cause irritation of the digestive tract which may result in nausea, vomiting and diarrhea.

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:

Flush eyes immediately with fresh water for at least 15 minutes while holding the eyelids open. Remove contact lenses if worn. No additional first aid should be necessary. However, if irritation persists, see a doctor.

SKIN CONTACT:

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

INHALATION:

If a person breathes large amounts, move the exposed person to fresh air. If breathing is difficult, see a doctor.

INGESTION:

If swallowed, give water or milk to drink and telephone for medical advice. DO NOT make the person vomit unless directed to do so by medical personnel. 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:

Sodium Chloride decomposes when heated above 801°C and may release toxic fumes of chlorine and sodium oxides.

NFPA RATINGS:

Health 1; Flammability 0; Reactivity 0; Special NDA:

HMIS 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

SPILL/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. Avoid breathing dust.

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 granule & white crystalline solids.

pH (20°C):

8-10 for CMA, 6-8 for NaCl (10% aqueous solution)

SPECIFIC GRAVITY:

1.8

MELTING POINT:

No data available

SOLUBILITY:

Partially soluble in water.



CRYOTECH CMA40®

MATERIAL SAFETY DATA SHEET

10. STABILITY & REACTIVITY

HAZARDOUS DECOMPOSITION PRODUCTS:

Sodium Chloride decomposes to chlorine and sodium oxides. CMA produces no hazardous decomposition products.

STABILITY:

Stable

HAZARDOUS POLYMERIZATION:

Polymerization will not occur.

INCOMPATIBILITY:

None for CMA. Sodium Chloride is reactive with oxidizing agents, acids, Lithium, bromine trifluoride.

SPECIAL PRECAUTIONS:

READ AND OBSERVE ALL PRECAUTIONS ON PRODUCT LABEL. KEEP CONTAINER TIGHTLY CLOSED IN ANY GENERAL CHEMICAL STORAGE AREA.

11. TOXICOLOGICAL INFORMATION

EYE IRRITATION (CMA):

The Draize Eye Irritation Score (range, 0-110) in rabbits is 8.7.

SKIN IRRITATION (CMA):

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.

DERMAL TOXICITY (CMA):

The dermal LD50 in rabbits is >5.0 g/kg.

RESPIRATORY/INHALATION (CMA):

The 4-hour inhalation LC50 in rats is 4.6 mg/liter.

RESPIRATORY/INHALATION (NaCl):

The 4-hour inhalation LC50 in rats is >2100 ml/m³

INGESTION (CMA):

The oral LD50 in rats is greater than 5000 mg/liter. Additional Toxicological Data: The 96-hour LC50 in rainbow trout (*Salmo gairdneri*) is >1000 mg/L

The 48-hour LC50 daphnia (*Daphnia magna*) 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.

INGESTION (NaCl):

The oral LD50 in rats is 3000 mg/kg.

12. ECOLOGICAL INFORMATION

CMA COD (TOD): 0.75 kg O₂/kg

CMA BOD₂₀ @ 2° C: 0.40 kg O₂/kg

CMA BOD₂₀ @ 10° C: 0.67 kg O₂/kg

Sodium Chloride may be harmful to freshwater aquatic species and to plants that are not saline tolerant.

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.

14. TRANSPORT INFORMATION

Not restricted under any transport regulations.

15. REGULATORY INFORMATION

ALL OF THE COMPONENTS IN THIS PRODUCT ARE ON THE FOLLOWING INVENTORY LISTS:

U.S.A. (TSCA)

Europe (EINECS)

Canada (DSL/NDSL)

TSCA SECTION 12(b):

None of the components in this product are regulated under TSCA Section 12(b).

OSHA HAZARD CLASSIFICATION:

Hazardous Chemical (Irritant);

None of the components in this product are considered highly hazardous by OSHA.

CERCLA HAZARDOUS SUBSTANCES:

There is no CERCLA Reportable Quantity for this material.

SARA 311 CATEGORIES:

Immediate (Acute) Health Hazard: Yes

Delayed (Chronic) Health Hazard: No

Fire Hazard: No

Sudden Release of Pressure Hazard: No

Reactivity Hazard: No

SARA 313:

None of the components in this product are subject to reporting under SARA Section 313.

CLEAN WATER ACT:

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.

STATE RIGHT-TO-KNOW:

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.

WHMIS (Canada) CLASSIFICATION:

Not controlled

16. OTHER INFORMATION

ADDITIONAL HEALTH DATA COMMENT:

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>

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.