

### CRYOTECH NAAC<sup>®</sup>40 Solid Commercial Deicer

Safety Data Sheet

Section 1: IDENTIFICATION

#### PRODUCT IDENTIFIER

#### **CRYOTECH NAAC®40**

Solid Commercial Deicer

#### **RECOMMENDED USE OF CHEMICAL AND RESTRICTIONS ON USE**

Deicing pavements, parking structures, etc. Not intended for airside use.

#### DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET

Name/Address:	Cryotech Deicing Technology
	6103 Orthoway
	Fort Madison, IA 52627
	United States
Contact Information:	Telephone: (800) 346-7237
	Fax: (319) 372-2662
	Email: <u>deicers@cryotech.com</u>
	Website: <u>www.cryotech.com</u>

#### **EMERGENCY TELEPHONE NUMBER**

CHEMTREC (800) 424-9300 Outside USA and Canada (703) 741-5970

#### Section 2: HAZARD(S) IDENTIFICATION

CLASSIFICATION ACCORDING TO OSHA HAZCOM 2012Hazard ClassNot classified as hazardous

**LABEL ELEMENTS ACCORDING TO OSHA HAZCOM 2012** There are no OSHA required label elements for this product.

#### **CLASSIFICATION ACCORDING TO WHMIS (Canada)**

Hazard Class	Not controlled
WHMIS Hazard Symbols	Not applicable
WHMIS Signal Word	Not applicable

#### HAZARDS NOT OTHERWISE CLASSIFIED (HNOC)

May be harmful if swallowed.



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#### Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

#### **MIXTURES**

Ingredient	CAS No	Wt. %
Sodium Acetate – anhydrous	127-09-3	40
Sodium Chloride	7647-14-5	60
And small amounts of nonhazardous additives such as corrosion inhibitors and anticaking agents		

#### Section 4: FIRST- AID MEASURES

DESCRIPTION OF FIRST AID ME Eye	EASURE In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. If easy to do, remove contact lenses, if worn. If irritation persists, seek medical attention.
Skin	As a precaution, wash skin thoroughly with soap and water. Remove and wash contaminated clothing.
Inhalation	If inhaled, remove to fresh air and get medical advice
Ingestion	If swallowed, give milk or water to drink and telephone for medical advice. Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person.
MOST IMPORTANT SYMPTOMS	/ EFFECTS
Еуе	May cause temporary eye irritation. Symptoms may include temporary discomfort, excess blinking, tear production, redness and/or swelling.
Skin	May cause itching or irritation of any cut or abraded skin. Symptoms of prolonged contact may include dry skin.
Inhalation	This product is not otherwise expected to be an inhalation hazard.
Ingestion	Ingestion of large quantities may cause nausea, vomiting, diarrhea and abdominal discomfort.
INDICATION OF IMMEDIATE ME	DICAL ATTENTION AND SPECIAL TREATMENT

Specific treatmentsIf you feel unwell, seek medical advice immediately. Show the label or safety<br/>data sheet to medical personnel if possible.



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Section 5: FIRE FIGHTING MEASURES

FLAMMABILITY Flash Point (close cup) Auto Ignition	Nonflammable by OSHA/WHMIS criteria Not applicable
EXTINGUISHING MEDIA	
Suitable Extinguishing Media	Water, carbon dioxide, or dry chemical. Use extinguishing media appropriate for surrounding materials.
Unsuitable Extinguishing Media	Not applicable
SPECIAL HAZARDS	
Hazardous Combustion Products	Normal combustion forms carbon dioxide and water.
Explosion Limits	Data not available. Not expected to be an explosion hazard.
Unusual Fire Hazards	None expected

#### SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIREFIGHTERS

**Special Protective Equipment for** Wear protective equipment suitable for the surrounding environment. **Firefighters** 

Section 6: ACCIDENTAL RELEASE MEASURES

**PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT, AND EMERGENCY PROCEDURES** Avoid eye/skin contact with spilled material. Refer to Section 7 for additional handling precautions

Methods for Containment	If material is dissolved, contain and/or absorb spill with inert material (e.g.
	sawdust, sand, vermiculite).
Methods for Cleaning-Up	Scoop up material and transfer to disposal container. If needed, wash
	spillage area with plenty of water.

#### Section 7: HANDLING AND STORAGE

#### PRECAUTIONS FOR SAFE HANDLING

Handling

Avoid eye contact. Avoid breathing dust when handling.

#### PRECAUTIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

StorageBest practice is to store in tightly sealed original containers. Store away from<br/>direct heat and strong oxidizing agents. Do not store or handle product in<br/>systems constructed of wetted parts consisting of galvanized steel, zinc, or brass<br/>components.



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#### Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE LIMITS	
TWA PEL:	No specific limits have been established for this product. As a guideline, OSHA (United States) has established the following limits which are generally recognized for inert or nuisance dust. Particulates Not Otherwise Regulated (PNOR): 8-hr TWA limits of 15 mg/m <sup>3</sup> (total particulate) and 5 mg/m <sup>3</sup> (respirable fraction).
TWA TLV:	No specific limits have been established for this product. As a guideline, ACGIH (United States) has established the following limits which are generally recognized for inert or nuisance dust. Particulates (insoluble) Not Otherwise Classified (PNOC): 8-hr TWA limits of 10 mg/m <sup>3</sup> (as total dust) and 3 mg/m <sup>3</sup> (as respirable).
EXPOSURE CONTROLS	
Engineering Controls	No special ventilation is usually necessary; however if operating conditions create high concentrations of this material, special ventilation may be needed to keep exposure to airborne contaminants below the exposure limit.
INDIVIDUAL PROTECTIVE MEAS	URES/PERSONAL PROTECTIVE EQUIPMENT
Eye Protection	Safety glasses or goggles are recommended if eye contact is possible.
Skin Protection	No special skin protection is usually necessary. Chemical-resistant gloves should be used if prolonged exposure is possible to prevent drying of skin.
Respiratory Protection	No special respiratory protection is usually necessary. Breathing of dust should be avoided. If operating conditions create high airborne concentrations of this material, the use of an approved respirator is recommended.



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#### Section 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	White to gray spherical pellet
ODOR	Odorless to slight vinegar odor
ODOR THRESHOLD	No data available
рН (20°С, 68°F)	8-10.5 (15% aqueous solution)
MELTING POINT	324°C (615°F)
BOILING POINT	Not applicable
FLASH POINT	Not applicable
EVAPORATION RATE	Not applicable
FLAMMABILITY/EXPLOSION LIMITS	Data not available
VAPOR PRESSURE (20°C)	Not applicable
VAPOR DENSITY (AIR = 1)	Not applicable
RELATIVE DENSITY	1.5
SOLUBILITY IN WATER	Partially soluble
PARTITION COEFFICIENT; n-OCTANOL/WATER	Data not available
AUTO-IGNITION TEMPERATURE	Data not available
DECOMPOSITION TEMPERATURE	Data not available
VISCOSITY (20°C)	Not applicable
OXIDIZING PROPERTIES	Not oxidizing
EXPLOSIVE PROPERTIES	Not explosive

#### Section 10: STABILITY AND REACTIVITY

#### REACTIVITY

No dangerous reactions known under conditions of normal use.

#### CHEMICAL STABILITY

Stable. Polymerization will not occur.

#### **POSSIBILITY OF HAZARDOUS REACTIONS**

No dangerous reactions known under conditions of normal use.

#### **CONDITIONS TO AVOID**

Avoid prolonged contact with reactive metals such as magnesium and zinc, especially in closed systems where hydrogen gas from the oxidation of these materials may accumulate over time.

#### **INCOMPATIBLE MATERIALS**

Strong oxidizing agents; strong acids.

#### HAZARDOUS DECOMPOSITION PRODUCTS

May decompose into oxides of carbon.



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Section 11: TOXICOLOGICAL INFORMATION

#### **ACUTE TOXICITY**

LD50 rat-oral: > 5 g/kg.

#### LIKELY ROUTES OF EXPOSURE

Skin contact, eye contact, ingestion.

#### SYMPTOMS RELATED TO THE PHYSICAL, CHEMICAL, AND TOXICOLOGICAL CHARACTERISTICS

Eye	May cause temporary eye irritation. Corneal injury is unlikely.
Skin	Repeated contact may cause minor skin irritation or dry skin.
Inhalation	Inhalation of dust during handling may cause respiratory tract irritation and coughing. This product is not otherwise expected to be an inhalation hazard.
Ingestion	Ingestion of large quantities may cause nausea, vomiting, diarrhea and abdominal discomfort.

## DELAYED AND IMMEDIATE EFFECTS AND CHRONIC EFFECTS FROM SHORT- AND LONG-TERM EXPOSURE/NUMERICAL MEASURES OF TOXICITY

Skin Corrosion/Irritation	Based on available data, the classification criteria are not met.
Serious Eye Damage/Irritation	Based on available data, the classification criteria are not met.
<b>Respiratory or Skin Sensitization</b>	Based on available data, the classification criteria are not met.
Germ Cell Mutagenicity	Based on available data, the classification criteria are not met.
Carcinogenicity	This product does not contain any ingredients that are considered to be
	carcinogens by IARC, NTP, or OSHA.
Reproductive Toxicity	Based on available data, the classification criteria are not met.
STOT-Single Exposure	Based on available data, the classification criteria are not met.
STOT-Repeated Exposure	Based on available data, the classification criteria are not met.
Aspiration Hazard	Based on available data, the classification criteria are not met.

#### Section 12: ECOLOGICAL INFORMATION

#### ECOTOXICITY (AQUATIC AND TERRESTRIAL)

Not expected to cause long-term adverse effects in the aquatic or terrestrial environments.

#### **PERSISTENCE AND DEGRADABILITY** Readily biodegradable. COD (TOD): 0.74 g O<sub>2</sub>/g deicer; BOD<sub>5</sub> (20°C): 0.45 g O<sub>2</sub>/g deicer

#### **BIOACCUMULATIVE POTENTIAL**

Bioaccumulation is not expected.

MOBILITY IN SOIL Adverse effects not expected.

**OTHER ADVERSE EFFECTS** 

None expected.



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#### Section 13: DISPOSAL CONSIDERATIONS

#### WASTE TREATMENT AND METHODS OF DISPOSAL

Based on available information, this product is neither listed as a hazardous waste nor does it exhibit any of the characteristics that would cause it to be classified as a characterized hazardous waste under RCRA. This product may be absorbed onto suitable materials and disposed of in a sanitary landfill unless local, state, or provincial regulations prohibit such disposal.

#### Section 14: TRANSPORT INFORMATION

#### **TRANSPORT INFORMATION**

Not regulated as dangerous goods per US DOT or IATA.

#### Section 15: REGULATORY INFORMATION

#### **INVENTORY LISTS**

All of the components in this product are on the following inventory lists: USA (TSCA), Canada (DSL/NDSL); Europe (EINECS)

#### **TSCA SECTION 12(b)**

None of the chemicals in this product are listed under TSCA Section 12(b).

#### **CERCLA HAZARDOUS SUBSTANCES**

There is no CERCLA Reportable Quantity for this material.

#### **SARA 311 CATEGORIES**

Physical hazards	
Explosive	No
Flammable (gases, aerosols, liquids or solids	No
Oxidizer (liquid, solid or gas)	No
Self- reactive	No
Pyrophoric (liquid or solid)	No
Pyrophoric Gas	No
Self-heating	No
Corrosive to metal	No
Gas under pressure (compressed gas)	No
In contact with water emits flammable gas	No
Combustible Dust	No
Hazard Not Otherwise Classified (HNOC)	No

Health hazards	
Acute toxicity (any route of exposure)	No
Skin corrosion or irritation	No
Serious eye damage or eye irritation	No
Respiratory or skin sensitization	No
Germ cell mutagenicity	No
Carcinogenicity	No
Reproductive toxicity	No
Specific target organ toxicity (single or repeated exposure)	No
Aspiration hazard	No
Simple Asphyxiant	No
Hazard Not Otherwise Classified (HNOC)	No



#### **SARA 313**

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

None of the chemicals in this product are listed as Priority Pollutants under the CWA. None of the chemicals 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, MN, and NJ.

This product does not contain materials 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.

NFPA 704		
Health	1	
Fire	0	
Physical Hazard	0	
	Hazard Rating 0-4 0-least hazardous; 4-most hazardous	

HMIS – Hazardous Materials Identification System		
Health	1	
Fire	0	
Physical Hazard	0	
Hazard Rating: 0 = minimal, 1 = slight, 2 = moderate, 3 = serious, 4 = severe		

#### Section 16: OTHER INFORMATION

#### **SDS REVISION DATE**

**Revision date: August 1, 2019 Expiration date:** August 1, 2022 Latest version of this SDS can be obtained from Cryotech.

#### NOTE TO EMPLOYER

This Safety Data Sheet contains environmental, health and toxicology information for your employees. Please ensure this information is provided 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 SDS must be given to the buyer or the information incorporated in your SDS. Discard any previous edition of this SDS.

#### DISCLAIMER

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, GENERAL ATOMICS INTERNATIONAL SERVICES CORPORATION dba Cryotech Deicing Technology 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. GENERAL ATOMICS INTERNATIONAL SERVICES CORPORATION dba Cryotech Deicing Technology 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.

#### **End of Safety Data Sheet**

Prepared According to the OSHA Hazard Communication Standard (29 CFR 1910.1200) by Cryotech Deicing Technology, 6103 Orthoway, Fort Madison, IA 52627 Form #MKT2302 Rev. August 1, 2019