1. PRODUCT NAME & DESCRIPTION
CRYOTECH NAAC® Solid Runway Deicer
Complies with Specification AMS 1431

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%.

<table>
<thead>
<tr>
<th>PERCENT CONTAINING</th>
<th>COMPONENT</th>
<th>CAS#</th>
</tr>
</thead>
<tbody>
<tr>
<td>100%</td>
<td>Cryotech NAAC® Solid Runway Deicer</td>
<td>127-09-3</td>
</tr>
<tr>
<td>97%</td>
<td>Sodium Acetate - anhydrous water-soluble material</td>
<td></td>
</tr>
</tbody>
</table>

3. HAZARD IDENTIFICATION (also see Sections 11 and 12)

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: >100°C

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

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.

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 gray spherical granule.

pH (20°C): 8-10.5 (15% aqueous solution)

SPECIFIC GRAVITY: 1.5

MELTING POINT: 324°C (615°F)

SOLUBILITY: Partially soluble in water.
# 10. STABILITY & REACTIVITY

**HAZARDOUS DECOMPOSITION PRODUCTS:** None known.

**STABILITY:** Stable

**HAZARDOUS POLYMERIZATION:** Polymerization will not occur.

**INCOMPATIBILITY:** May react with strong acids or strong oxidizing agents, such as chlorates, nitrates, peroxides, etc. Avoid prolonged contact with reactive metals such as magnesium and zinc, especially in closed systems where hydrogen gas may accumulate over time.

**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:** No product toxicity data available. The hazard evaluation was based on data from similar products.

**SKIN IRRITATION:** No product toxicity data available. The hazard evaluation was based on data from similar products.

**DERMAL TOXICITY:** No product toxicity data available. The hazard evaluation was based on data from similar products.

**RESPIRATORY/INHALATION:** No product toxicity data available. The hazard evaluation was based on data from similar products.

**INGESTION:** No product toxicity data available. The hazard evaluation was based on data from similar products.

---

# 12. ECOLOGICAL INFORMATION

**COD (TOD):** 0.74 g O₂/g deicer

**BOD₅ @ 20° C:** 0.45 g O₂/g deicer

---

# 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.
- 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
- 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.

**WHMIS (Canada) CLASSIFICATION:** Not controlled

**CLEAN WATER ACT:** None of the components in this product are listed as Priority 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

**WHMIS (Canada) CLASSIFICATION:** Not controlled

---

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.