Section 1: IDENTIFICATION

PRODUCT IDENTIFIER
CRYOTECH GLACIER AF® LAVATORY ANTIFREEZE

RECOMMENDED USE OF CHEMICAL AND RESTRICTIONS ON USE
Freeze point depressant in aircraft and transit lavatory systems

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: deicers@cryotech.com
Website: www.cryotech.com

EMERGENCY TELEPHONE NUMBER
CHEMTREC: (800) 424-9300
Outside U.S.A. & Canada: +1 703-741-5970

Section 2: HAZARD(S) IDENTIFICATION

CLASSIFICATION ACCORDING TO OSHA HAZCOM 2012
Hazard Class Not 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)
None known
Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CAS No</th>
<th>Wt. %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cryotech Glacier AF Lavatory Antifreeze Concentrate Aqueous solution containing:</td>
<td></td>
<td>100</td>
</tr>
<tr>
<td>Propylene Glycol</td>
<td>57-55-6</td>
<td>60-90</td>
</tr>
<tr>
<td>Corrosion inhibitors</td>
<td>&lt; 1%</td>
<td></td>
</tr>
</tbody>
</table>

Section 4: FIRST-AID MEASURES

DESCRIPTION OF FIRST AID MEASURE

Eye
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

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

Eye
May cause minor temporary eye irritation.

Skin
Unlikely to cause prolonged or significant skin irritation.

Inhalation
Inhalation of aerosol during spraying may cause physical respiratory tract irritation and coughing. This product is not otherwise expected to be an inhalation hazard.

Ingestion
Not expected to cause significant health effects by accidental ingestion.

INDICATION OF IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT

Specific treatments
If you feel unwell, seek medical advice immediately. Show the label or safety data sheet to medical personnel if possible.

Section 5: FIRE FIGHTING MEASURES

FLAMMABILITY
Non-flammable by OSHA/WHMIS criteria

EXTINGUISHING MEDIA
Suitable Extinguishing Media
Fine water spray, alcohol-resistant foam, carbon dioxide, or dry chemical. Use extinguishing media appropriate for surrounding materials.
SPECIAL HAZARDS

Hazardous Combustion Products  Combustion may form carbon monoxide (CO) and/or carbon dioxide (CO₂).

Unusual Fire Hazards  Heat from fire can generate flammable vapor. Vapor is heavier than air and may spread along floors. Pressure buildup in sealed containers in high heat conditions may cause container to rupture.

SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIREFIGHTERS

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

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  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. Wash the spillage area with plenty of water.

Section 7: HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING

Handling  Avoid eye contact. Avoid breathing mist/aerosols when handling.

PRECAUTIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

Storage  Store in tightly sealed original containers, away from direct heat and strong oxidizing agents, strong acids, or strong bases.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE LIMITS

<table>
<thead>
<tr>
<th>Exposure Limits</th>
<th>Regulation</th>
<th>Type of Listing</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Propylene Glycol</td>
<td>US WEEL</td>
<td>TWA</td>
<td>10 mg/m³</td>
</tr>
</tbody>
</table>

EXPOSURE CONTROLS

Engineering Controls  No special ventilation is usually necessary. Normal use of this product is not expected to result in airborne concentrations above the exposure limit.

INDIVIDUAL PROTECTIVE MEASURES/PERSONAL PROTECTIVE EQUIPMENT

Eye Protection  Safety glasses or goggles are recommended if splashing/spraying into eyes is possible.

Skin Protection  No special skin protection is usually necessary. Avoid prolonged or repeated contact.

Respiratory Protection  No special respiratory protection is usually necessary. Breathing of mist/aerosol should be avoided.
Section 9: PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>PROPERTY</th>
<th>VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Clear, colorless to light straw colored liquid.</td>
</tr>
<tr>
<td>Odor</td>
<td>Odorless</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH (20°C, 68°F)</td>
<td>7 - 10</td>
</tr>
<tr>
<td>Freezing Point</td>
<td>&lt; -60°F (-51°C)</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>&gt; 240°F (115°C)</td>
</tr>
<tr>
<td>Flash Point</td>
<td>&gt; 219°F (104°C) based on propylene glycol</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability/Explosion Limits</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Vapor Pressure (20°C)</td>
<td>~ 8 mmHg (vapor is almost entirely water fraction)</td>
</tr>
<tr>
<td>Vapor Density (Air = 1)</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative Density</td>
<td>1.02 - 1.06</td>
</tr>
<tr>
<td>Solubility in Water</td>
<td>Completely miscible</td>
</tr>
<tr>
<td>Partition Coefficient; n-Octanol/Water</td>
<td>No data available</td>
</tr>
<tr>
<td>Auto-Ignition Temperature</td>
<td>&gt; 400°C (752°F) based on propylene glycol</td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity (20°C)</td>
<td>21 cP</td>
</tr>
<tr>
<td>Oxidizing Properties</td>
<td>Not oxidizing</td>
</tr>
<tr>
<td>Explosive Properties</td>
<td>Not explosive</td>
</tr>
</tbody>
</table>

Section 10: STABILITY AND REACTIVITY

Reactivity
No dangerous reactions known under conditions of normal use.

Chemical Stability
Stable. Hazardous polymerization will not occur.

Possibility of Hazardous Reactions
No dangerous reactions known under conditions of normal use.

Conditions to Avoid
Avoid prolonged exposure to temperatures over the boiling point of water. When water has evaporated, material is combustible.

Incompatible Materials
Strong oxidizing agents; strong acids; strong bases.

Hazardous Decomposition Products
May decompose into oxides of carbon (e.g., carbon monoxide, carbon dioxide) as well as aldehydes, ethers, and organic acids.
ACUTE TOXICITY
LD50 rat-oral: > 15 g/kg (estimated from studies of components)

LIKELY ROUTES OF EXPOSURE
Skin contact, eye contact, ingestion.

SYMPTOMS RELATED TO THE PHYSICAL, CHEMICAL, AND TOXICOLOGICAL CHARACTERISTICS

Eye
May cause minor temporary eye irritation. Corneal injury is unlikely.

Skin
Unlikely to cause prolonged or significant skin irritation.

Inhalation
This product is not expected to be an inhalation hazard.

Ingestion
Not expected to cause significant health effects by accidental ingestion.

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.

Respiratory or Skin Sensitization
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.

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): 0.70 g O₂/g deicer; BOD₅ (20°C): 0.28 g O₂/g deicer (based on 50% dilution by volume as is recommended for normal use).

BIOACCUMULATIVE POTENTIAL
Bioaccumulation is not expected.

MOBILITY IN SOIL
Adverse effects not expected.

OTHER ADVERSE EFFECTS
None expected.
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 311/312 CATEGORIES

<table>
<thead>
<tr>
<th>Physical hazards</th>
<th>Health hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td>Explosive</td>
<td>Acute toxicity (any route of exposure)</td>
</tr>
<tr>
<td>Flammable (gases, aerosols, liquids or solids</td>
<td>Skin corrosion or irritation</td>
</tr>
<tr>
<td>Oxidizer (liquid, solid or gas)</td>
<td>Serious eye damage or eye irritation</td>
</tr>
<tr>
<td>Self-reactive</td>
<td>Respiratory or skin sensitization</td>
</tr>
<tr>
<td>Pyrophoric (liquid or solid)</td>
<td>Germ cell mutagenicity</td>
</tr>
<tr>
<td>Pyrophoric Gas</td>
<td>Carcinogenicity</td>
</tr>
<tr>
<td>Self-heating</td>
<td>Reproductive toxicity</td>
</tr>
<tr>
<td>Corrosive to metal</td>
<td>Specific target organ toxicity (single or repeated exposure)</td>
</tr>
<tr>
<td>Gas under pressure (compressed gas)</td>
<td>Aspiration hazard</td>
</tr>
<tr>
<td>In contact with water emits flammable gas</td>
<td>Simple Asphyxiant</td>
</tr>
<tr>
<td>Combustible Dust</td>
<td>Hazard Not Otherwise Classified (HNOC)</td>
</tr>
<tr>
<td>Hazard Not Otherwise Classified (HNOC)</td>
<td>No</td>
</tr>
</tbody>
</table>

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: MA.

This product contains the following chemicals regulated by New Jersey’s Worker and Community Right to Know Act, the Pennsylvania Right to Know Act, and the Minnesota Right to Know Act:

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<tr>
<td>Propylene Glycol</td>
<td>57-55-6</td>
<td>60-90</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Hazard Category</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
<td>0</td>
</tr>
<tr>
<td>Fire</td>
<td>1</td>
</tr>
<tr>
<td>Physical Hazard</td>
<td>0</td>
</tr>
</tbody>
</table>

Hazard Rating: 0-least hazardous; 4-most hazardous

HMIS – Hazardous Materials Identification System

<table>
<thead>
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<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
<td>0</td>
</tr>
<tr>
<td>Fire</td>
<td>1</td>
</tr>
<tr>
<td>Physical Hazard</td>
<td>0</td>
</tr>
</tbody>
</table>

Hazard Rating: 0 = minimal, 1 = slight, 2 = moderate, 3 = serious, 4 = severe

SDS REVISION DATE
Revision date: August 1, 2020
Expiration date: August 1, 2023.
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

by Cryotech Deicing Technology, 6103 Orthoway, Fort Madison, IA 52627
Form #MKT1852    Rev. August 1, 2019
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