MATERIAL SAFETY DATA SHEET

James Alexander Corporation 845 Route 94 Blairstown, NJ 07825
Product Name: AMMONIA INHALANT SOLUTION

MSDS Effective Date: March 1, 2010

CHEMTREC 24 Hour Emergency Phone: (800) 424-9300  Note: The CHEMTREC emergency number is to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure, or accident involving chemicals. All non-emergency questions should be directed to JAC at (908) 362-9266.

I. PRODUCT IDENTIFICATION

Manufacturer’s Name: James Alexander Corporation  
Phone: (908)362-9266
Emergency Telephone No.: (800)424-9300 (CHEMTREC)

Address: 845 Route 94 Blairstown, NJ 07825

Product Name: AMMONIA INHALANT SOLUTION

Shipping Information

<table>
<thead>
<tr>
<th>Domestic Shipments</th>
<th>Shipment Method</th>
<th>Overseas Shipments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumer Commodity ORM-D</td>
<td>Ground</td>
<td>IATA Shipping- Flammable Liquid Corrosive NOS, 3-UN2924, PGII (Ammonia, Ethanol) Subsidiary Risk (8) Exceptional Quantity (Form 40-631R)</td>
</tr>
<tr>
<td>CFR 173.4 Small Quantity Exception</td>
<td>Air</td>
<td>N/A</td>
</tr>
</tbody>
</table>

NFPA Ratings: Health - 3  Flammability - 3  Instability - 1

II. HAZARDOUS INGREDIENTS

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No.</th>
<th>%</th>
<th>PEL/TWA</th>
<th>TLV/TWA</th>
<th>TLV/STEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonia</td>
<td>7664-41-7</td>
<td>17.5</td>
<td>50 ppm</td>
<td>25 ppm</td>
<td>35 ppm</td>
</tr>
<tr>
<td>Ethyl Alcohol</td>
<td>64-17-5</td>
<td>37.5</td>
<td>1000 ppm</td>
<td>1000 ppm</td>
<td>Not listed</td>
</tr>
</tbody>
</table>

III. PHYSICAL DATA

Boiling Point: N/A for mixtures  Melting Point: Unknown
Specific Gravity: 0.891 25/25  Vapor Pressure: Unknown
Vapor Density: Unknown  Solubility in water: Very soluble
% volatiles by vol.: 55%  Evaporation Rate (Butyl acetate=1): Unknown
Appearance and odor: Clear, pink to light red liquid. Pungent odor of ammonia.
pH: Unknown

IV. FIRE & EXPLOSION INFORMATION

Flash Point: Less than 50 degrees F  Test Method: Pensky Martens Closed Cup
Autoignition temp: Ammonia 1204 degrees F (651°C); Ethyl Alcohol: 685 degrees F (363°C)
Flammable limits in air % by volume: Lower (Unknown)  Upper(Unknown)
Extinguishing media: “Alcohol resistant” foam, CO₂ or dry chemical.

Special fire fighting procedures:
   NOTE: Individuals should perform only those fire-fighting procedures for which they have been trained.
   Remove all sources of ignition. Move exposed containers from fire area if it can be done without risk. Firefighters should wear proper protective equipment and self-contained breathing apparatus with full facepiece operated in positive pressure mode. Spray extinguishing media directly into base of flames. Water may be used to keep fire-exposed containers cool.

Unusual fire and explosion hazard: When heated, mixture will give off ammonia gas, a strong irritant to eyes, respiratory tract, and mucous membranes. Other toxic gases produced are oxides of nitrogen, carbon monoxide, carbon dioxide and hydrogen. Closed containers exposed to heat may develop pressure and explode.
   Alcohol vapors are heavier than air and may travel a considerable distance to a source of ignition and flash back. Alcohols burn with a pale blue flame which may be extremely hard to see under normal lighting conditions. Personnel may be able to feel the heat of the fire without seeing flames. Extreme caution must be exercised in fighting alcohol fires.

V. HEALTH HAZARD INFORMATION

Primary routes of exposure: Inhalation, eye contact, skin contact, ingestion.

Signs and symptoms of overexposure:

   **Inhalation:** Irritation or burns of the respiratory system, headache, coughing, lung congestion or inflammation, pulmonary edema, breathing difficulty. Headache, dizziness, drowsiness, loss of appetite and an inability to concentrate.

   **Eye contact:** Severe irritation or burns, may lead to blindness.

   **Skin contact:** Local irritation, dry skin, burns.

   **Ingestion:** Burning pain in mouth, throat, constriction of throat, coughing, followed by nausea, vomiting or diarrhea. Ingestion may prove fatal.

Medical Conditions Aggravated by Exposure: Individuals with pre-existing nervous system disorders, skin disorders, eye problems, or impaired respiratory function may be more susceptible to the effects of overexposure.

VI. EMERGENCY AND FIRST AID PROCEDURES

   **For Inhalation:** Remove subject immediately to fresh air. Give artificial respiration if victim is not breathing. If breathing is difficult, give oxygen. Get immediate medical attention.
CHEMTREC 24 Hour Emergency Phone: (800) 424-9300  Note: The CHEMTREC emergency number is to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure, or accident involving chemicals. All non-emergency questions should be directed to JAC at (908) 362-9266.

For Eye Contact: Immediately flush eyes with copious amounts of water for at least 15 minutes. Eyelids should be held apart and away from eyeball for thorough rinsing. Do not permit victim to rub eyes. Get immediate medical attention.

For Skin Contact: Immediately flush skin with copious amounts of water for at least 15 minutes while removing contaminated clothing and shoes. Do not rub or apply ointment to affected area. Obtain medical attention if irritation persists. Wash clothing before re-use.

For Ingestion: Contact a Poison Control Center immediately. Do NOT induce vomiting. If conscious, have victim swallow large amounts of water. Do not give anything by mouth to an unconscious or convulsing person. Get immediate medical attention.

VII. TOXICITY DATA

None of the components present in this formulation are currently classified as carcinogens in the NTP Annual Report on Carcinogens, IARC Monographs or by OSHA.

VIII. PERSONAL PROTECTION

Storage Requirements: Protect containers from physical damage. Detached or outside storage is preferred. Inside storage should be in an NFPA approved flammable liquids storage room or cabinet. Store in corrosion-proof area at temperatures below 77 degrees F (25°C). Do not store in direct sunlight. Isolate from incompatible materials. Keep containers tightly closed.

Handling Requirements: All ignition sources should be eliminated. Remove closure carefully; internal pressure may be present. Keep closure up to prevent leakage. When contents are being transferred, metallic containers must be bonded to the receiving container and grounded to avoid static discharges. Never use pressure to empty containers. Replace closure carefully after each opening.

Ventilation: Not required for product (JAC unit dose inhalant) use. When handling bulk material, use general or local exhaust ventilation to meet TLV requirements. Where engineering controls are not feasible or sufficient to achieve full conformance with acceptable exposure limits, use NIOSH approved respiratory protection equipment. Care must be taken to assure that any respirator chosen is capable of protecting the user from both ammonia and ethyl alcohol vapors. In some cases, a self-contained breathing apparatus may be advisable.

Eye Protection: Not required for product (JAC unit dose inhalant) use. When handling bulk material, always wear gas-tight, splash-proof chemical safety goggles meeting OSHA 29CFR 1910.133 specifications.

Skin Protection: Not required for product (JAC unit dose inhalant) use. Use rubber gloves, protective suit, face shield and overshoes when handling bulk product.
IX. HAZARDOUS REACTIVITY

Stable at room temperature. Hazardous polymerization will not occur. However, product will react exothermically with acids. Releases ammonia vapor when heated. Ammonia component will decompose to hydrogen and oxides of nitrogen when heated. Carbon monoxide gas may also be produced when heated.

Conditions To Avoid: Sunlight, heat (heating above ambient temperatures causes the vapor pressure of the solution to increase).
   Avoid mixing with acids, most common metals, strong oxidizing agents, brass, zinc, chlorine, aluminum, copper, bronze, mercury, dimethyl sulfate and acetyl chloride.

X. SPILL, LEAK AND DISPOSAL PROCEDURES

For large spills, stop leak if you can do so without risk. Extinguish all sources of ignition. Wear self-contained breathing apparatus, chemical safety goggles and full protective clothing. Ventilate area. Spilled liquids should be contained and not washed into sewers or ground water. Contain by diking with non-combustible absorbent materials and place residue in DOT approved waste container.

Comply with all applicable local, state and federal regulations on spill reporting, handling and disposal of waste.

Other Precautions: Containers, even those that have been emptied, will retain product residue and vapors. Handle empty containers as if they were full.

Prepared By: David Robinson
Title: Vice President
Date of Initial Preparation: June 1989
Latest Revision Date: March 1, 2010

NOTE: This Material Safety Data Sheet is intended only as a guide to the appropriate precautionary handling of the material by a person trained in, or supervised by a person trained in, the safe handling of chemical materials. James Alexander Corporation (JAC), expressly disclaims all express or implied warranties of merchantability and fitness for a particular purpose with respect to the product or information provided herein.

All information appearing herein is based upon data obtained from the manufacturer(s) and/or recognized technical sources. While the information is believed to be accurate, JAC makes no representations as to its accuracy or sufficiency. Conditions of use are beyond JAC’s control and therefore, users are responsible to verify this data under their own operating conditions to determine whether the product is suitable for their particular purposes and they assume all risks of their use, handling, and disposal of the product, or from the publication or use of, or reliance upon, information contained herein. This information relates only to the product designated herein and does not relate to its use in combination with any other material or in any other process.
RAPI D AID INSTANT COLD PACK

MSDS Revision Date (dd/mm/yyyy): 18/03/2009

MATERIAL SAFETY DATA SHEET

SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

Product identifier : RAPID AID INSTANT COLD PACK

Product Use : Provides relief for bruises and swelling, muscle spasm and pain, headaches and minor injuries.

Chemical Family : Inorganic ammonium salt.

Supplier’s name and address: 

Rapid Aid Ltd.
4120A Sladeview Crescent, Units 1 - 4
Mississauga, ON, Canada
L5L 5Z3

Manufacturer’s name and address: 

Refer to Supplier

Information Telephone No. : (905) 820-4788

24 Hr. Emergency Tel # : (905) 820-4788

SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS #</th>
<th>% (weight)</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonium nitrate</td>
<td>6484-52-2</td>
<td>40.00 - 70.00</td>
<td>N/Av</td>
<td>N/Av</td>
</tr>
</tbody>
</table>

SECTION 3 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

White, odourless solid chemical supplied with water bag.

This product may be considered a ‘manufactured article’ or ‘medical device’. Harmful effects are not expected under normal usage.

Chemical from damaged, un-activated cold pack may have the following hazards:

Danger. Strong oxidizer which will promote combustion. Contact with combustible material may cause fire.

May explode in fire. This product reacts with acids evolving considerable heat.

May be harmful if inhaled or swallowed.

May cause headache, nausea, dizziness and other symptoms of central nervous system depression.

Can cause cyanosis. Contains material which may cause adverse blood system effects.

Chemical from damaged, activated cold pack may have the following hazards:

Activation results in chemicals mixing inside the cold pack. The reaction that occurs is endothermic, causing the solution to become cold.

Prolonged contact may cause numbness. Causes little or no irritation.

***POTENTIAL HEALTH EFFECTS***

Target organs : Eyes, skin, digestive system, respiratory system, blood system.

Routes of exposure : Inhalation: YES Skin Absorption: NO Skin & Eyes: YES Ingestion: YES

Signs and symptoms of short-term (acute) exposure

Inhalation : Harmful effects are not expected under normal usage.

Chemical from damaged, un-activated cold pack may have the following hazards:

Inhalation of dust may cause shortness of breath, tightness of the chest, a sore throat and cough. Irritating or noxious gases may be released during thermal decomposition. Inhalation of high concentrations may cause unconsciousness and cyanosis (bluish discoloration of the skin).

Skin : Harmful effects are not expected under normal usage.

Chemical from damaged, un-activated cold pack may have the following hazards:

May cause mild skin irritation. Skin contact may provoke the following symptoms: Red, puffy, itching skin.

Chemical from damaged, activated cold pack may have the following hazards:

Prolonged contact may cause numbness. Causes little or no irritation.
Harmful effects are not expected under normal usage.

Chemical from damaged, un-activated cold pack may have the following hazards: Direct eye contact may cause slight redness.

Chemical from damaged, activated cold pack may have the following hazards: Contact with eyes may cause irritation. Symptoms include: Inflammation of eye tissue, characterized by redness, watering, and/or itching.

Eyes

Harmful effects are not expected under normal usage.

Chemical from damaged cold pack may have the following hazards: May cause irritation of mouth, throat, and stomach. Symptoms may include nausea, vomiting, dizziness, drowsiness and other symptoms of central nervous system depression. Ingestion of large quantities of nitrates may affect oxygen transport in the blood and blood system, causing methemoglobinemia. Large doses can cause shock, convulsions, coma and eventual death.

Ingestion

Harmful effects are not expected under normal usage.

Chemical from damaged cold pack may have the following hazards: Contains material which may cause adverse blood system effects.

Ingestion:

Effects of long-term (chronic) exposure

Harmful effects are not expected under normal usage.

Chemical from damaged cold pack may have the following hazards: Contains material which may cause adverse blood system effects.

Inhalation

Harmful effects are not expected under normal usage.

Recommended first aid for exposure to chemical from damaged cold pack: Immediately remove person to fresh air. If breathing has stopped, give artificial respiration. If breathing is difficult, give oxygen by qualified medical personnel only. Get medical attention.

Skin contact

Harmful effects are not expected under normal usage.

Recommended first aid for exposure to chemical from damaged cold pack: For skin contact, flush with water for at least 15 minutes, while removing contaminated clothing. If irritation occurs or persists, seek medical attention.

Eye contact

Harmful effects are not expected under normal usage.

Recommended first aid for exposure to chemical from damaged cold pack: Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.

Ingestion

Harmful effects are not expected under normal usage.

Recommended first aid for exposure to chemical from damaged cold pack: Do not induce vomiting. Have victim rinse mouth with water, then give one to two glasses of water to drink. Never give anything by mouth to an unconscious person. Seek immediate medical attention/advice.

Notes For Physician

Treat symptomatically.
Fire hazards/conditions of flammability:

- Explosive decomposition may occur under fire conditions. Heat of decomposition may cause closed containers to build up pressure and explode.
- Chemical from damaged, un-activated cold pack may have the following hazards:
  - Strong oxidizer which will promote combustion. Contact with combustible material may cause fire. This product reacts with acids evolving considerable heat.

Flammability classification (OSHA 29 CFR 1910.1200):

- Not flammable under normal conditions of handling.
- Flash point: N/A
- Flash point Method: N/A
- Auto-ignition temperature: N/A
- Lower flammable limit (% by vol.): N/A
- Upper flammable limit (% by vol.): N/A
- Oxidizing properties: Chemical from damaged, un-activated cold pack may have the following hazards:
  - Strong oxidizer which will promote combustion. Will accelerate combustion and increase the risk of fire and explosion in combustible or flammable materials.
- Flame Projection Length: N/A
- Flashback observed: N/A

Explosion data: Sensitivity to mechanical impact / static discharge:

- Explosive decomposition may occur under fire conditions. Heat of decomposition may cause closed containers to build up pressure and explode.
- Suitable extinguishing media: Use water spray to fight fires. Use chemical extinguishing agents with caution. Some chemical extinguishing agents may accelerate decomposition.
- Special fire-fighting procedures / equipment: Fight fires from a safe distance. Evacuate personnel to safe areas. Firefighters should wear proper protective equipment and self-contained breathing apparatus with full face piece operated in positive pressure mode. A full-body chemical resistant suit should be worn. Move containers from fire area if safe to do so. Water spray may be useful in cooling equipment exposed to heat and flame.

Hazardous combustion products:

- Ammonia; nitrogen oxides (NOx).

NFPA Rating:

- Health: 1
- Flammability: 0
- Instability: 3
- Special Hazards: OX

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Personal precautions:

- Ensure clean-up is conducted by trained personnel only. Keep all other personnel upwind and away from the spill/release. Wear suitable protective equipment. For personal protection see section 8.

Environmental precautions:

- Ensure spilled product does not enter drains, sewers, waterways, or confined spaces.

Spill response/cleanup:

- Pick up loose items, and place in container for disposal.

Recommended clean-up procedure when un-activated cold packs are damaged:

- Ventilate area of release. Remove all sources of ignition. Remove combustible materials. Use only non-sparking tools and equipment in the clean-up process. Cover any spilled material with non-combustible absorbent material, such as vermiculite or sand, then place absorbent material into a container for later disposal (see Section 13). Use methods that do not generate dusts. Notify the appropriate authorities as required.

Recommended clean-up procedures when activated cold packs are damaged:

- Ventilate area of release. Remove all sources of ignition. Contain and absorb spilled liquid with non-combustible, inert absorbent material (e.g. sand), then place absorbent material into a container for later disposal (see Section 13). Notify the appropriate authorities as required.

Prohibited materials:

- Do not use combustible absorbents, such as sawdust.

Special spill response procedures:

- In case of a transportation accident, in the United States contact CHEMTREC at 1-800-424-9300 or International at 1-703-527-3887. If a spill/release in excess of the EPA reportable quantity is made into the environment, immediately notify the national response center in the United States (phone: 1-800-424-8002). US CERCLA Reportable quantity (RQ): None reported.
SECTION 7 - HANDLING AND STORAGE

Safe Handling procedures: Use in a well-ventilated area. Protect from damage. Keep away from heat and flame. Keep away from combustible material.

Recommended handling procedures when un-activated cold pack is damaged:
Wear suitable protective equipment. Avoid breathing dust. Avoid and control operations which create high vapor or dust concentrations. Do not ingest. Avoid contact with skin, eyes and clothing. Never return contaminated material to its original container. Label containers appropriately. Wash thoroughly after handling.

Recommended handling procedures when activated cold pack is damaged: Wear suitable protective equipment. Avoid breathing vapour or mist. Avoid contact with skin, eyes and clothing. Wash thoroughly after handling.

Storage requirements: Store in a cool, dry, well-ventilated area. Store away from incompatibles and out of direct sunlight. Inspect periodically for damage or leaks. No smoking in the area. Protect from damage.

Incompatible materials: Acids; Reducing agents; Combustible materials; Organic materials; Reactive metals; Fuel; Halogenated compounds; Copper.

Special packaging materials: Always keep in containers made of the same materials as the supply container.

SECTION 8 - EXPOSURE CONTROLS AND PERSONAL PROTECTION

Ventilation and engineering measures: Not a hazard under normal conditions of use.

Recommended protective measures when cold packs are damaged:
Use general or local exhaust ventilation to maintain air concentrations below recommended exposure limits.

Respiratory protection: Not required under normal conditions of handling.

Recommended protective measures when cold packs are damaged:
Respiratory protection is required if the concentrations exceed the TLV. Advice should be sought from respiratory protection specialists.

Skin protection: None required when used as intended.

Recommended protective measures when cold packs are damaged:
Gloves impervious to the material are recommended. The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Eye / face protection: None required when used as intended.

Recommended protective measures when cold packs are damaged:
Chemical splash goggles are recommended.

Other protective equipment: None required under normal conditions.

Recommended protective measures when cold packs are damaged:
An eyewash station and safety shower should be made available in the immediate working area. Other equipment may be required depending on workplace standards.

General hygiene considerations: Handle in accordance with good industrial hygiene and safety practice.

Recommended protective measures when cold packs are damaged:
Avoid contact with skin, eyes and clothing. Avoid breathing vapors, fumes or dust. Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product. Wear only clean, uncontaminated clothes when leaving place of work.
**PERMISSIBLE EXPOSURE LEVELS**

For individual ingredient exposure levels, see Section 2.

**SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**

<table>
<thead>
<tr>
<th>Physical state</th>
<th>Solid</th>
<th>Appearance</th>
<th>White, odourless solid chemical supplied with water bag.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Odour</td>
<td>odourless</td>
<td>Odour threshold</td>
<td>N/Av</td>
</tr>
<tr>
<td>pH</td>
<td>N/Av</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boiling point</td>
<td>176.7°C (350°F) (Decomposition temperature)</td>
<td>Specific gravity</td>
<td>1.725</td>
</tr>
<tr>
<td>Melting/Freezing point</td>
<td>N/Ap</td>
<td>Coefficient of water/oil distribution</td>
<td>N/Av</td>
</tr>
<tr>
<td>Vapour pressure (mmHg @ 20°C / 68°F)</td>
<td>N/Ap</td>
<td>Solubility in water</td>
<td>Complete</td>
</tr>
<tr>
<td>Vapour density (Air = 1)</td>
<td>N/Ap</td>
<td>Evaporation rate (n-Butyl acetate = 1)</td>
<td>N/Ap</td>
</tr>
<tr>
<td>Volatile organic Compounds (VOC’s)</td>
<td>N/Av</td>
<td>Volatiles (% by weight)</td>
<td>N/Av</td>
</tr>
</tbody>
</table>

**SECTION 10 - REACTIVITY AND STABILITY DATA**

**Stability and reactivity**

Stable under the recommended storage and handling conditions prescribed. Unstable with heat or contamination. Chemical from damaged, un-activated cold pack may have the following hazards: Strong oxidizer which will promote combustion. Contact with combustible material may cause fire.

**Hazardous polymerization**

Not expected under prescribed storage and handling conditions. Decomposition may occur at extremely high temperatures.

**Conditions to avoid**

Avoid heat and open flame. Ensure adequate ventilation, especially in confined areas. Avoid contact with incompatible materials. Keep out of direct sunlight. Keep away from combustible material.

**Materials To Avoid And Incompatibility**

See Section 7 (Handling and Storage) for further details.

**Hazardous decomposition products**

None known, refer to hazardous combustion products in Section 5.

**SECTION 11 - TOXICOLOGICAL INFORMATION**

**Toxicological data**

There is no available data for the product itself, only for the ingredients. Refer to Section 2 for individual ingredient LD50’s and LC50’s.

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>LC50 (4hr) inh, rat &gt; 88,800 mg/m³</th>
<th>oral 2217 mg/kg (rat)</th>
<th>LD50 dermal N/Av</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonium nitrate</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Carcinogenic status**

No components are listed as carcinogens by ACGIH, IARC, OSHA or NTP.

**Reproductive effects**

Not expected to have other reproductive effects.

**Teratogenicity**

Not expected to be a teratogen.

**Mutagenicity**

Not expected to be mutagenic in humans.

**Epidemiology**

No information available.

**Sensitization to material**

Not expected to be a skin or respiratory sensitizer.

**Synergistic materials**

N/Av

**Irritancy**

Mild skin irritant. May cause eye irritation.

**other important hazards**

None known or reported by the manufacturer.
SECTION 12 - ECOLOGICAL INFORMATION

Environmental effects: The product should not be allowed to enter drains or water courses, or be deposited where it can affect ground or surface waters.

Important environmental characteristics: No data is available on the product itself.

Ecotoxicological: No data is available on the product itself.

SECTION 13 - DISPOSAL CONSIDERATIONS

Handling for Disposal: Handle waste according to recommendations in Section 7. Empty containers retain residue (liquid and/or vapour) and can be dangerous.

Methods of Disposal: Dispose in accordance with all applicable federal, state, provincial and local regulations. Contact your local, state, provincial or federal environmental agency for specific rules.

RCRA: If this product, as supplied, becomes a waste in the United States, it may meet the criteria of a hazardous waste as defined under RCRA, Title 40 CFR 261. It is the responsibility of the waste generator to determine the proper waste identification and disposal method.

SECTION 14 - TRANSPORTATION INFORMATION

<table>
<thead>
<tr>
<th>Regulatory Information</th>
<th>UN Number</th>
<th>Shipping Name</th>
<th>Class</th>
<th>Packing Group</th>
<th>Label</th>
</tr>
</thead>
<tbody>
<tr>
<td>TDG</td>
<td>UN1942</td>
<td>AMMONIUM NITRATE</td>
<td>5.1</td>
<td>III</td>
<td></td>
</tr>
<tr>
<td>TDG Additional information</td>
<td></td>
<td>Within Canada only, this product may be shipped according to the 500 kg Gross Mass Exemption. Each means of containment must be marked with either the dangerous goods safety marks required by Part 4 or the proper shipping name. The dangerous goods must be accompanied by a proper shipping document. Refer to TDG Section 1.16 for detailed information on this exemption. If shipping by ground to destinations outside Canada, the limited quantity exemption may be used. Under the TDGR, refer to Section 1.17 for additional exemption information, if shipping under this exemption.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>49CFR/DOT</td>
<td>UN1942</td>
<td>Ammonium nitrate</td>
<td>Limited quantity</td>
<td>III</td>
<td></td>
</tr>
<tr>
<td>49CFR/DOT Additional information</td>
<td></td>
<td>As supplied, this product can be shipped as a limited quantity in the United States. The UN number placed within the square-on-point border appearing here, or the proper shipping name, must appear on the package in accordance with 49 CFR Part 172.315.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ICAO/IATA</td>
<td>UN1942</td>
<td>Ammonium nitrate</td>
<td>5.1</td>
<td>III</td>
<td></td>
</tr>
<tr>
<td>ICAO/IATA Additional information</td>
<td></td>
<td>Refer to ICAO/IATA Packing Instruction : Y516, 516 or 518. Review all State and Operator Variations, prior to shipping this material.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

SECTION 15 - REGULATORY INFORMATION

US Federal Information:
TSCA: All listed ingredients appear on the Toxic Substances Control Act (TSCA) inventory.

OSHA: This material is not classified as hazardous under OSHA regulations (29 CFR Part 1910.1200). This product is considered an ‘article’ under 29 CFR Part 1910.1200.

CERCLA Reportable Quantity (RQ) (40 CFR 117.302): None reported.
RAPID AID INSTANT COLD PACK

MSDS Revision Date (dd/mm/yyyy): 18/03/2009

SARA TITLE III: Sec. 302, Extremely Hazardous Substances, 40 CFR 355: No Extremely Hazardous Substances are present in this material.

SARA TITLE III: Sec. 311 and 312, MSDS Requirements, 40 CFR 370 Hazard Classes: None. If outer containers are damaged and leaking: Reactive hazard; Immediate (Acute) health hazard; Chronic Health Hazard.

SARA TITLE III: Sec. 313, Toxic Chemicals Notification, 40 CFR 372: This material is not subject to SARA notification requirements, since it does not contain any Toxic Chemical constituents above de minimus concentrations.

US State Right to Know Laws:
New Jersey Labeling Requirements: This product contains the following substances required to be disclosed on product labeling: Ammonium nitrate (CAS # 6484-52-2);Water (CAS # 7732-18-5).

California Proposition 65: To the best of our knowledge, this product does not contain any chemicals known to the State of California to cause cancer or reproductive harm.

Other U.S. State "Right to Know" Lists: The following chemicals are specifically listed by individual States: Ammonium nitrate (MA, PA, RI).

International Information:
Canadian Environmental Protection Act (CEPA) information: All ingredients listed appear on the Domestic Substances List (DSL).

Canadian WHMIS Classification: This product is not a WHMIS controlled product in Canada. This product may be considered a 'manufactured article' or 'medical device'. For informational purposes, this product would have the following WHMIS classification:
Class C (Oxidizing Material);
Class D2B (Materials Causing Other Toxic Effects, Toxic Material).

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.

SECTION 16 - OTHER INFORMATION

<table>
<thead>
<tr>
<th>HMIS Rating</th>
<th>Health</th>
<th>Flammability</th>
<th>Reactivity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>0</td>
<td>3</td>
</tr>
</tbody>
</table>

Legend:
ACGIH: American Conference of Governmental Industrial Hygienists
CAS: Chemical Abstract Services
CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act of 1980
DOT: Department of Transportation
EPA: Environmental Protection Agency
HMIS: Hazardous Materials Identification System
HSDB: Hazardous Substances Data Bank
IARC: International Agency for Research on Cancer
Inh: Inhalation
LC: Lethal Concentration
LD: Lethal Dose
MA: Massachusetts
MSHA: Mine Safety and Health Administration
N/Ap: Not Applicable
N/Av: Not Available
NFPA: National Fire Protection Association
NIOSH: National Institute of Occupational Safety and Health
NTP: National Toxicology Program
OSHA: Occupational Safety and Health Administration
PA: Pennsylvania
PEL: Permissible exposure limit
RCRA: Resource Conservation and Recovery Act
RI: Rhode Island
RTECS: Registry of Toxic Effects of Chemical Substances
SARA: Superfund Amendments and Reauthorization Act
MSDS Revision Date (dd/mm/yyyy): 18/03/2009

STEL: Short Term Exposure Limit
TDG: Canadian Transportation of Dangerous Goods Act & Regulations
TLV: Threshold Limit Values
TWA: Time Weighted Average
TSCA: Toxic Substance Control Act
WHMIS: Workplace Hazardous Materials Identification System

References:
1. ACGIH, Threshold Limit Values and Biological Exposure Indices for 2008.
3. Canadian Centre for Occupational Health and Safety, CCInfoWeb databases, 2009 (Chempendium and RTECs).
4. Material Safety Data Sheet from manufacturer.
5. US EPA Title III List of Lists October 2006 version.

Prepared for:
Rapid Aid Ltd.
4120A Sladeview Crescent, Units 1 - 4
Mississauga, ON, Canada, L5L 5Z3
Telephone: 905-820-4788
Please direct all enquiries to Rapid Aid.

Prepared by:
ICC The Compliance Center Inc.
Canada: 1-888-977-4834
USA: 1-888-442-9628
http://www.thecompliancecenter.com

DISCLAIMER OF LIABILITY
This Material Safety Data Sheet was prepared by ICC The Compliance Center Inc. using information provided by Rapid Aid Ltd. and CCOHS' Web Information Service. The information in the Material Safety Data Sheet is offered for your consideration and guidance when exposed to this product. ICC The Compliance Center Inc and Rapid Aid Ltd. expressly disclaim all expressed or implied warranties and assume no responsibilities for the accuracy or completeness of the data contained herein. The data in this MSDS does not apply to use with any other product or in any other process.

This Material Safety Data Sheet may not be changed, or altered in any way without the expressed knowledge and permission of ICC The Compliance Center Inc. and Rapid Aid Ltd.

MSDS Preparation Date (dd/mm/yyyy):
04/06/2008

MSDS Reviewed Date (dd/mm/yyyy):
18/03/2009

Revision No.:
2

Revision Information:
(M)SDS sections updated: 2. COMPOSITION/INFORMATION ON INGREDIENTS

END OF DOCUMENT
Material Safety Data Sheet

NFPA/HMIS Ratings Legend
Severe = 4; Serious = 3; Moderate = 2; Slight = 1; Minimal = 0

<table>
<thead>
<tr>
<th>NFPA</th>
<th>HMIS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

Issuing Date January 9, 2010
Revision Date
Revision Number 0

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name PDI Alcohol Prep Pads/Swabsticks (1’s & 3’s)
Product Code(s) WPS-NP-022A
Recommended Use Topical skin antiseptic

Supplier Address
Professional Disposables International, Inc.
Two Nice-Pak Park
Orangeburg, NY 10962
P: 845-365-1700

Nice-Pak Products, Inc.
Two Nice-Pak Park
Orangeburg, NY 10962
P: 845-365-1700
2. HAZARDS IDENTIFICATION

CAUTION!

Emergency Overview
Combustible
May cause skin and eye irritation

Appearance Colorless Physical State Pre-moistened towelette. Odor Alcohol

Potential Health Effects

Principle Routes of Exposure Skin contact, Eye contact.

Acute Toxicity

Eyes May cause irritation.
Skin May cause irritation.
Inhalation Not an expected route of exposure.
Ingestion Not an expected route of exposure.

Chronic Effects No known effect.

Aggravated Medical Conditions Preexisting eye disorders, Skin disorders.

Environmental Hazard See Section 12 for additional Ecological Information.

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isopropyl alcohol</td>
<td>67-63-0</td>
<td>60-100</td>
</tr>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>30-60</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

General Advice Call a poison control center or doctor for treatment advice. Have the product containers or label with you when calling a poison control center or doctor, or going for treatment.

Eye Contact In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes. Call a physician if irritation persists.

Skin Contact Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. If skin irritation persists, call a physician.

Inhalation Move victim to fresh air. Apply artificial respiration if victim is not breathing. Administer oxygen if breathing is difficult.

Ingestion Call a physician or Poison Control Center immediately. Do NOT induce vomiting. Drink plenty of water.

Notes to Physician Keep victim warm and quiet.

Protection of First-aiders Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.
5. FIRE-FIGHTING MEASURES

Flammable Properties
- Combustible material. ICAO Test Method 1.1.2.1.
- Flash Point (Liquid Only): 78°F / 25.6°C (for liquid)

Method
- Tag closed cup

Suitable Extinguishing Media
- Dry chemical, CO₂, water spray or alcohol-resistant foam. Use water spray or fog; do not use straight streams.

Hazardous Combustion Products
- Carbon oxides.

Explosion Data
- Sensitivity to Mechanical Impact: None.
- Sensitivity to Static Discharge: May be ignited by heat, sparks or flames.

Protective Equipment and Precautions for Firefighters
- Move containers from fire area if you can do it without risk. As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA
- Health Hazard: 1
- Flammability: 1
- Stability: 0
- Physical and Chemical Hazards: N/A

HMIS
- Health Hazard: 1
- Flammability: 1
- Physical Hazard: 0
- Personal Protection: A

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions
- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). All equipment used when handling the product must be grounded. Do not touch or walk through spilled material. Stop leak if you can do it without risk.

Methods for Containment
- A vapor suppressing foam may be used to reduce vapors. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.

Methods for Cleaning Up
- Use clean non-sparking tools to collect absorbed material. Dike far ahead of liquid spill for later disposal.

Other Information
- Water spray may reduce vapor; but may not prevent ignition in closed spaces.

7. HANDLING AND STORAGE

Handling
- Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin and eyes.

Storage

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>NIOSH IDLH</th>
</tr>
</thead>
</table>
| Isopropyl alcohol 67-63-0 | STEL = 400 ppm  
TWA: 200 ppm | TWA: 400 ppm  
TWA: 980 mg/m³  
(vacated) TWA: 400 ppm  
(vacated) TWA: 980 mg/m³  
(vacated) STEL: 1225 mg/m³  
(vacated) STEL: 500 ppm | IDLH: 2000 ppm  
10% LEL  
TWA: 980 mg/m³  
TWA: 400 ppm  
STEL: 500 ppm  
STEL: 1225 mg/m³ |
NIOSH IDLH: Immediately Dangerous to Life or Health

Engineering Measures
Showers, eyewash stations, and ventilation systems.

Personal Protective Equipment

Eye/Face Protection
No special protective equipment required.

Skin and Body Protection
Protective gloves.

Respiratory Protection
No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

Hygiene Measures
Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Colorless</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>No information available</td>
</tr>
<tr>
<td>pH</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Flash Point</td>
<td>78°F / 25.6°C (for liquid)</td>
</tr>
<tr>
<td>Autoignition Temperature</td>
<td>No information available</td>
</tr>
<tr>
<td>Boiling Point/Range</td>
<td>No information available</td>
</tr>
<tr>
<td>Flammability Limits in Air</td>
<td>No information available</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>0.877</td>
</tr>
<tr>
<td>Solubility</td>
<td>No information available</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>VOC Content</td>
<td>62% w/w%</td>
</tr>
<tr>
<td>Odor</td>
<td>Alcohol</td>
</tr>
<tr>
<td>Odor State</td>
<td>Pre-moistened towelette</td>
</tr>
<tr>
<td>Method</td>
<td>Tag closed cup</td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>No information available</td>
</tr>
<tr>
<td>Melting Point/Range</td>
<td>No information available</td>
</tr>
<tr>
<td>Explosion Limits</td>
<td>No information available</td>
</tr>
<tr>
<td>Water Solubility</td>
<td>Soluble in water</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>No information available</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>No data available</td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

Stability
Stable under recommended storage conditions.

Incompatible Products
Strong oxidizing agents.

Conditions to Avoid
Heat, flames and sparks.

Hazardous Decomposition Products
Carbon oxides.

Hazardous Polymerization
Hazardous polymerization does not occur.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Product Information

Irritation
May cause skin and eye irritation.

Chronic Toxicity

Chronic Toxicity
No known effect.

Target Organ Effects
Skin, Eyes.
12. ECOLOGICAL INFORMATION

Ecotoxicity
The environmental impact of this product has not been fully investigated.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Methods
This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements.

Contaminated Packaging
Dispose of in accordance with local regulations.

14. TRANSPORT INFORMATION

DOT
Not regulated

ICAO
Not regulated

IATA
Not regulated

IMDG/IMO
Not regulated

15. REGULATORY INFORMATION

International Inventories

TSCA
Complies

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

U.S. Federal Regulations

SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

<table>
<thead>
<tr>
<th>Hazard Category</th>
<th>SARA 311/312</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Health Hazard</td>
<td>Yes</td>
</tr>
<tr>
<td>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>Reactive Hazard</td>
<td>No</td>
</tr>
</tbody>
</table>

Clean Water Act
This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).
CERCLA
This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

U.S. State Regulations

California Proposition 65
This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Massachusetts</th>
<th>New Jersey</th>
<th>Pennsylvania</th>
<th>Illinois</th>
<th>Rhode Island</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isopropyl alcohol</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

16. OTHER INFORMATION

Prepared By
Nice-Pak Products, Inc.
2 Nice-Pak Park
Orangeburg, NY 10962
1-845-365-1700

Issuing Date
January 9, 2010

Revision Date
No information available

Disclaimer
The information provided on this MSDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text

End of Safety Data Sheet
# Material Safety Data Sheet

**Safetec of America**

**Section 1 - Product / Company Identification**

**Identity (As Used on Label and List)**

- **Medique's Burn Cream**
- **Manufacturer's Name:** Safetec of America, Inc.
- **Address:** 1055 East Delavan Avenue, Buffalo, NY 14215

**Section 2 - Hazardous Ingredients / Identity Information**

<table>
<thead>
<tr>
<th>Hazardous Component</th>
<th>CAS #</th>
<th>% (wt.)</th>
<th>ACGIH TLV/TWA/STEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lidocaine HCl</td>
<td>50-03-3</td>
<td>0.5</td>
<td>None Established</td>
</tr>
</tbody>
</table>

This product is not known to contain a substance subject to Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) and 40 CFR 372 at or above minimal amounts.

**Section 3 - Health Hazard Data**

<table>
<thead>
<tr>
<th>Routes of Entry / Signs and Symptoms of Exposure</th>
<th>Emergency and First Aid Procedures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inhalation: Unlikely route of exposure.</td>
<td>None expected.</td>
</tr>
<tr>
<td>EYES: Brief contact may cause mild irritation; prolonged contact may cause moderate irritation associated with redness.</td>
<td>Flush eyes with clear running water for a minimum of 15 minutes while holding eyelids open; if irritation persists, seek medical attention.</td>
</tr>
<tr>
<td>SKIN: Prolonged or repeated skin contact may cause mild irritation.</td>
<td>Flush with clear running water for a minimum of 15 minutes; if irritation persists, seek medical attention.</td>
</tr>
<tr>
<td>INGESTION: Small amounts swallowed incidental to normal handling are not likely to cause injury. Swallowing larger amounts may cause injury.</td>
<td>DO NOT induce vomiting; seek immediate medical attention.</td>
</tr>
</tbody>
</table>

**Health Hazards (Acute and Chronic):** Acute effects are possible irritation and discomfort; chronic effects are possible with the ingestion of large amounts to the nervous system. Do not use on abraded skin.

**Carcinogenicity:** NTP? No, IARC Monographs? No, OSHA Regulated? No

**Medical Conditions Generally Aggravated by Exposure:** Preexisting skin or eye disorders may become aggravated through prolonged exposure.
SECTION 4 - FIRE FIGHTING MEASURES

FLASH POINT (METHOD USED) | FLAMMABLE LIMITS (% Volume in Air for Lowest Flashing Component)
Not applicable | LEL: Not applicable  UEL: Not applicable

EXTINGUISHING MEDIA
Water, water spray, dry chemicals, chemical foam, CO₂

SPECIAL FIRE FIGHTING PROCEDURES
Do NOT enter confined fire space without full bunker gear (helmet with face shield, bunker coats, gloves and rubber boots). Wear NIOSH/MSHA approved self contained breathing apparatus. Cool fire exposed containers with water.

UNUSUAL FIRE AND EXPLOSIVE HAZARDS
None Known

SECTION 5 - PRECAUTIONS FOR SAFE HANDLING AND USE / LEAK PROCEDURES

STEPS TO BE TAKEN IF MATERIAL IS SPILLED OR RELEASED
Spills should be collected with approved inert absorbent for disposal. Use suitable disposal containers.

WASTE DISPOSAL METHODS
Dispose of in accordance with local, state, and federal regulations. Products classified as non-hazardous may become hazardous waste upon contact with other products. Refer to 40 CFR Protection of Environment Parts 260-299 for complete waste disposal regulations. Consult your local, state, or federal Environmental Protection Agency before disposing of any chemicals.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE
Keep this and other chemicals out of reach of children.

SECTION 6 - EXPOSURE CONTROLS / PERSONAL PROTECTION

RESPIRATORY PROTECTION
Ordinarily, none required

VENTILATION
LOCAL EXHAUST: MECHANICAL (GENERAL): Not required

PROTECTIVE GLOVES
Ordinarily, none required

EYE PROTECTION
Not required for normal use

OTHER PROTECTIVE CLOTHING OR EQUIPMENT
Ordinarily, none required

WORK / HYGIENIC PRACTICES
Practice safe work habits. Use according to label instructions.

SECTION 7 - PHYSICAL / CHEMICAL PROPERTIES

BOILING POINT
No data

SPECIFIC GRAVITY (WATER = 1)
0.99

VAPOR PRESSURE (mm Hg)
No data

MELTING POINT
No data

VAPOR DENSITY (AIR = 1)
No data

PH (1% solution in water)
No data

SOLUBILITY IN WATER
Soluble

E-VAPORATION RATE (IPA = 1)
No data

APPEARANCE AND ODOR
White to Off-white Homogenous Cream

% VOLATILES (BY VOLUME)
No data

SECTION 8 - STABILITY AND REACTIVITY

STABILITY
UNSTABLE: XXX

CONDITIONS TO AVOID
Extreme temperatures

STABLE: XXX

INCOMPATIBILITIES (MATERIALS TO AVOID)
Strong oxidizing agents

HAZARDOUS DECOMPOSITION OR BYPRODUCTS
Decomposition will not occur if handled / stored properly. Thermal decomposition may produce carbon monoxide, small amounts of nitrogen oxides, halogenated compounds or propionaldehyde may also be formed.

HAZARDOUS POLYMERIZATION
MAY OCCUR: None known

CONDITIONS TO AVOID
WILL NOT OCCUR: XXX

The information contained herein is believed to be accurate but is not warranted to be so. Users are advised to confirm in advance of need that information is current, applicable and suited to the circumstances of use. Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material. If reasonable safety procedures are not adhered to as stipulated in this data sheet. Furthermore, vendor assumes no responsibility for injury caused by abnormal use of this material even if reasonable safety procedures are followed.

MSDS PREPARED BY: Safety of America, Inc., 1055 East Delaware Avenue, Buffalo, NY 14215 (716) 955-1522
Form Revised 6/01/2000
MATERIAL SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

**Trade Name:** 10% PVP Iodine  
**Formula:** Mixture  
**MSDS Date of Preparation:** February 05, 2010

CareFusion  
11400 Tomahawk Creek Pkwy  
Leawood, KS  66211  
PHONE: (800) 523-0502   FAX: (913) 451-8509

**EMERGENCY CONTACT:** CHEMTREC 1-800-424-9300  
- This number to be used only for spills, leaks, fire, exposure or accidents. Please direct all other inquiries to CareFusion Customer Service at (800) 523-0502.

2. HAZARDS IDENTIFICATION

This product consists of small glass ampoule containing a clear, brown liquid with a characteristic odor inside an applicator.

**EMERGENCY OVERVIEW**  
**CAUTION!**

Causes eye irritation. May cause skin irritation. Inhalation of vapors or mists may cause respiratory irritation.

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No.</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polyvinylpyrrolidone-Iodine complex</td>
<td>25655-41-8</td>
<td>10%</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

**Skin:** Wash material off the skin with water. If redness, rash or a burning sensation develops, seek medical attention and discontinue use.  
**Eyes:** Flush with copious amounts of water. After initial flushing remove any contact lenses and continue flushing for at least 15 minutes. Get medical attention if irritation persists.  
**Ingestion:** Give individual one to two glasses of water to drink. Get immediate medical attention. (Never give anything by mouth to an unconscious person)  
**Inhalation:** If symptoms of exposure develop, move to fresh air. Seek medical attention if symptoms persist.
5. FIRE FIGHTING MEASURES

Extinguishing Media: This product is not combustible. Use any media that is appropriate for the surrounding fire. Use water to cool fire exposed products.
Special Fire Fighting Procedures: Firefighters should wear positive pressure self-contained breathing apparatus and full protective clothing for all fires involving chemicals.
Unusual Fire & Explosion Hazards: Ampoules may explode if exposed to extreme heat or flame. Decomposition products are toxic.

6. ACCIDENTAL RELEASE MEASURES

For small spills, wipe or mop up and rinse to sewer serviced by a wastewater treatment facility. For large spills ventilate spill area. Wear skin, eye and respiratory protection during clean up (See Section 8). Soak up liquid with inert absorbent and collect into a suitable waste container. Wash residue from spill area with water and flush to sewer serviced by a wastewater treatment facility if permitted.

7. HANDLING AND STORAGE

Avoid prolonged exposure (ingestion, inhalation, or skin). Avoid breathing mists. Use in well ventilated areas.

Store in a cool, dry, well-ventilated area away from incompatible chemicals.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines:

| Polyvinylpyrrolidone-Iodine complex | None Established |

Eye Protection: Avoid eye contact. Safety glasses or goggles recommended if eye contact is possible.

Gloves: Latex rubber or nitrile recommended for prolonged contact.

Respiratory Protection: If the exposure levels are excessive a NIOSH approved organic vapor/acid gas respirator appropriate for the form and concentration of the contaminants should be used. Selection and use of respiratory equipment must be in accordance with OSHA 1910.134 and good industrial hygiene practice.

Engineering Controls: Use with adequate general or local exhaust ventilation to minimize exposure levels.
9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boiling Point</td>
<td>Approx 212°F</td>
</tr>
<tr>
<td>Melting Point</td>
<td>N/A</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>Same as water</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>Not determined</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>Same as water</td>
</tr>
<tr>
<td>% Volatile by volume</td>
<td>98</td>
</tr>
<tr>
<td>Water Solubility</td>
<td>Soluble</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>Same as water</td>
</tr>
<tr>
<td>pH</td>
<td>Unknown</td>
</tr>
<tr>
<td>Flash point</td>
<td>None</td>
</tr>
<tr>
<td>Flammable Limits</td>
<td>LEL: N/A</td>
</tr>
<tr>
<td></td>
<td>UEL: N/A</td>
</tr>
</tbody>
</table>

Appearance & Odor: Clear, brown liquid with a characteristic odor

10. STABILITY AND REACTIVITY

Stability: Stable
Incompatibility: Oxidizing materials.
Hazardous polymerization: Will not occur.
Hazardous decomposition products: Carbon monoxide, carbon dioxide, iodine vapors.
Conditions to avoid: Excessive heat.

11. TOXICOLOGICAL INFORMATION

HEALTH HAZARDS:
Ingestion: Ingestion may cause mucous membrane and gastrointestinal irritation, abdominal pain, nausea and vomiting. May cause kidney and thyroid effects.
Inhalation: Inhalation of mists may cause mucous membrane and respiratory irritation.
Eye: Contact may cause irritation with redness, tearing and pain.
Skin: May cause irritation. In rare cases may cause skin sensitization (allergic reaction).
 Chronic: Prolonged overexposure to iodine may cause iodism characterized by salivation, nasal discharge, fever, laryngitis, bronchitis and skin rash. Chronic exposure to iodine may also cause kidney and thyroid damage.
Carcinogenicity: None of the components is listed as a carcinogen or suspected carcinogen by IARC, NTP or OSHA.
Medical Conditions Aggravated by Exposure: Employees with pre-existing skin, kidney, thyroid and respiratory diseases may be at increased risk from exposure.

Acute Toxicity Values:
Polyvinylpyrrolidone-Iodine complex: Oral Rat LD50 >8,000 mg/kg

12. ECOLOGICAL INFORMATION

No data is available at this time.
13. DISPOSAL CONSIDERATIONS

Dispose in accordance with local, state and federal environmental regulations.

14. TRANSPORT INFORMATION

DOT Information

Proper Shipping Name: Not Regulated
Hazard Class: None
UN Number: None

IMO Information

Proper Shipping Name: Not Regulated
Hazard Class: None
UN Number: None

IATA Information

Proper Shipping Name: Not Regulated
Hazard Class: None
UN Number: None

15. REGULATORY INFORMATION

CERCLA: This product is not subject to CERCLA reporting requirements, however, many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

SARA Hazard Category (311/312): Acute Health, Chronic Health.

SARA 313: This product contains the following chemicals subject to Annual Release Reporting Requirements Under SARA Title III, Section 313 (40 CFR 372): None

EPA TSCA Inventory: All of the ingredients in this product are listed on the EPA TSCA Inventory.

16. OTHER INFORMATION

HMIS Rating: Health = 1 Fire = 0 Reactivity = 0

ACGIH: American Conference of Governmental Industrial Hygienists
IARC: International Agency for Research on Cancer
OSHA: Occupational Safety and Health Administration
NTP: National Toxicology Program
PEL: Permissible exposure Level (OSHA)

TLV: Threshold Limit Value (ACGIH)
TWA: Time Weighted Average over 8 hours
TCC: Tagged Closed Cup

REVISION SUMMARY

<table>
<thead>
<tr>
<th>CAF NUMBER</th>
<th>2010-02-11</th>
</tr>
</thead>
<tbody>
<tr>
<td>REVISION</td>
<td>E</td>
</tr>
<tr>
<td>DATE</td>
<td>02/05/10</td>
</tr>
<tr>
<td>SUMMARY OF CHANGE</td>
<td>Update company name and logo from Cardinal Health, Inc. to CareFusion throughout document.</td>
</tr>
</tbody>
</table>

To see remaining history see Rev. D