Material Safety Data Sheet

PRODUCT CODE NUMBERS: MDS137000, MDS138000, MDS138010, MDS138055, MDS139000, MDS148000, MDS148010, MDS148055, MDS148075, MDS158055

SECTION 1

ISSUE DATE: November 8, 2010
IDENTITY: Instant Cold Pack

MARKETED OR DISTRIBUTED BY:
Medline Industries, Inc.
One Medline Place
Mundelein, IL 60060
1.800.MEDLINE

Emergency Telephone Information:
Contact Your Regional Poison Control Center

SECTION 2 - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

<table>
<thead>
<tr>
<th>Hazardous Components</th>
<th>CAS #</th>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
<th>Other limits Recommended</th>
<th>% (Optional)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonium nitrate</td>
<td>6484-52-2</td>
<td>N/Av</td>
<td>N/Av</td>
<td>40.0-70.0</td>
<td></td>
</tr>
</tbody>
</table>

SECTION 3 - PHYSICAL/CHEMICAL CHARACTERISTICS

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boiling point</td>
<td>176.7°C</td>
</tr>
<tr>
<td>SP Gravity (water=1)</td>
<td>1.725</td>
</tr>
<tr>
<td>Vapor pressure (mm Hg)</td>
<td>N/Ap</td>
</tr>
<tr>
<td>Melting Point</td>
<td>N/Ap</td>
</tr>
<tr>
<td>Vapor density (air=1)</td>
<td>N/Ap</td>
</tr>
<tr>
<td>Evaporation Rate (butyl acetate=1)</td>
<td>N/Ap</td>
</tr>
<tr>
<td>Solubility in water</td>
<td>Complete</td>
</tr>
<tr>
<td>Appearance and odor</td>
<td>White, odourless solid chemical supplied with water bag</td>
</tr>
</tbody>
</table>

SECTION 4 - FIRE AND EXPLOSION HAZARD DATA

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flammable limits</td>
<td>N/Ap</td>
</tr>
<tr>
<td>LEL</td>
<td>N/Ap</td>
</tr>
<tr>
<td>UEL</td>
<td>N/Ap</td>
</tr>
<tr>
<td>Extinguishing media</td>
<td>Use water spray to fight fires. Use chemical extinguishing agents with caution. Some chemical extinguishing agents may accelerate decomposition.</td>
</tr>
<tr>
<td>Special Fire Fighting Procedures</td>
<td>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.</td>
</tr>
<tr>
<td>Unusual Fire and Explosive Hazards</td>
<td>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.</td>
</tr>
</tbody>
</table>

SECTION 5 - REACTIVITY DATA

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stability</td>
<td>Stable under the recommended storage and handling conditions prescribed. Unstable with heat or contamination.</td>
</tr>
<tr>
<td>Conditions to avoid</td>
<td>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.</td>
</tr>
<tr>
<td>Incompatibility (materials to avoid)</td>
<td>Acids, reducing agents, combustible materials, organic materials, reactive metals, fuel, halogenated compounds, copper.</td>
</tr>
<tr>
<td>Hazardous decomposition or byproducts</td>
<td>None known</td>
</tr>
<tr>
<td>Hazardous combustion products</td>
<td>Ammonia, nitrogen oxide</td>
</tr>
</tbody>
</table>
Hazardous polymerization: Not expected under prescribed storage and handling conditions. Decomposition may occur at extremely high temperatures.

**SECTION 6 - HEALTH HAZARD DATA**

<table>
<thead>
<tr>
<th>Route(s) of Entry:</th>
<th>Skin Absorption: No</th>
<th>Skin and eyes: Yes</th>
<th>Ingestion: Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inhalation: Yes</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**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.

**Eyes:** 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.

**Ingestion:** 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.

**Chronic:** 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.

<table>
<thead>
<tr>
<th>Carcinogenicity?</th>
<th>NTP?</th>
<th>IARC?</th>
<th>OSHA Regulated?</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

Medical conditions generally aggravated by exposure: Disorders of eye, skin, blood, kidney and central nervous system.

**Emergency and First Aid procedures:**

**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.
Material Safety Data Sheet

PRODUCT CODE NUMBERS: MDS137000, MDS138000, MDS138010, MDS138055, MDS139000, MDS148000, MDS148010, MDS148055, MDS148075, MDS158055

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

SECTION 7 - SPILL, LEAK, AND WASTE DISPOSAL PROCEDURES

Steps to be taken in case material is released or spilled: 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. 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. Notify the appropriate authorities as required. Do not use combustible absorbents, such as sawdust.

Waste Disposal Method: Dispose of wastes in accordance with Federal, State and local codes. Ensure spilled product does not enter drains, sewers, waterways, or confined spaces.

Precautions to be taken in handling and storing: Store and handle according to packaged instructions. 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 vapor or mist. Avoid contact with skin, eyes and clothing. Wash thoroughly after handling.

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

Other 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.

SECTION 8 - CONTROL MEASURES

Respiratory Protection (specify type): Respiratory protection is not required under normal and intended uses.

Ventilation: Local Exhaust: Special:

Mechanical (General) Use general or local exhaust ventilation to maintain air concentrations below recommended exposure limits.

Other:

Protective gloves: 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 Protection: None required when used as intended.

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

Other protective clothing or 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.

Work/hygienic practices: 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.
SECTION 9 – 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>![5.1]</td>
</tr>
</tbody>
</table>

**TDG Additional Information**
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 TDG, refer to Section 1.17 for additional exemption information, if shipping under this exemption.

<table>
<thead>
<tr>
<th>49CFR/DOT Additional Information</th>
<th>UN1942</th>
<th>Ammonium Nitrate</th>
<th>Limited quantity</th>
<th>III</th>
</tr>
</thead>
</table>

**49CFR/DOT Additional Information**
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.

<table>
<thead>
<tr>
<th>49CFR/DOT Additional Information</th>
<th>UN1942</th>
<th>Ammonium Nitrate</th>
<th>5.1</th>
<th>III</th>
</tr>
</thead>
</table>

**ICAO/IATA Additional Information**
Refer to ICAO/IATA Packing Instruction: Y516, 516 or 518. Review all State and Operator Variations, prior to shipping this material.

SECTION 10 - 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.
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.
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.
US State Right to Know Laws:
Other U.S. State "Right to Know" Lists: The following chemicals are specifically listed by individual States: Ammonium nitrate (MA, PA, RI).
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).

SECTION 11 - ADDITIONAL INFORMATION

The information provided in this Material Safety Data Sheet has been obtained from sources believed to be reliable. Medline Industries, Inc. provides no warranties, either expressed or implied and assumes no responsibility for the accuracy or completeness of the data contained herein.

Document Revision History:
Issued: November 8, 2010 New document