
Regulatory Status:
None of the components present in this preparation at concentrations equal to or greater than 0.1% are listed by IARC, NTP, OSHA or ACGIH as a carcinogen.

SECTION 1: PRODUCT IDENTIFICATION

PRODUCT NAME: Instant Cold Pack
SERIES NAME: 0101 0102 0103 0104 0201 0202 4112 0401 0402
DESCRIPTION: ColdStar Disposable Instant Cold Compress
ColdStar Reusable Instant Insulated Cold Compress
ColdStar Soft-Weave Instant Cold Compress
ColdStar Instant Cold Perineal Cold Pad

PRODUCT USE: Thermal Therapy
DISTRIBUTOR: Coldstar International
PO Box 54
Johnson City, TN 37605
Telephone: +1 (423) 538-5551
Fax: +1 (423) 538-3030
Website: www.coldstarinternational.com

SECTION 2: HAZARD IDENTIFICATION

This SDS contains valuable information critical to the safe handling and proper use of the product. The SDS should be retained and available for employees and other users of this product.

CLASSIFICATION OF THE SUBSTANCE OR MIXTURE:
GHS 3.1.14 – Oxidizing Solid – Category 3 – Solid
GHS 3.2.1 – Acute Toxicity – Category 5 – Oral
GHS 3.2.3 – Skin Irritant – Category 3 – Mild Skin Irritant
GHS 3.2.4 – EYE EFFECTS – Category 2A – Irritant
GHS 3.2.5 – SENSITIZATION – Respiratory – Nose and Throat Irritant

GHS LABEL ELEMENTS: WARNING

HAZARD-DETERMINING COMPONENTS OF LABELING:
Ammonium Nitrate

HAZARD STATEMENTS:
H272 – May Intensify fire; Oxidizer
H303 – May be harmful if swallowed
H315 + H320 – Causes skin and eye irritation
H335 – May Cause Respiratory irritation

PRECAUTIONARY STATEMENTS:
P102 – Keep out of reach of children
P103 – Read label before use
P210 – Keep away from heat/sparks/open flames/hot surfaces. No Smoking
P221 – Take any precaution to avoid mixing with combustibles / incompatible materials
P311 – Call a POISON CENTER or doctor/physician.

CLASSIFICATION SYSTEM: NFPA DEFINITIONS: 0-LEAST, 1-SLIGHT, 2-MODERATE, 3-HIGH, 4-EXTREEM

NFPA RATING DIAMOND (SCALE 0-4):
HEALTH= 0 - Least
FIRE= 0 - Least
REACTIVITY= 3 - Least

HMIS-RATINGS (SCALE 0-4):
HEALTH: 1
FIRE: 1
REACTIVITY: 3
SECTION 3: COMPOSITION INFORMATION

COMPOSITION: Mixture consisting of the following components

<table>
<thead>
<tr>
<th>ITEM</th>
<th>C.A.S. NO.</th>
<th>PERCENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonium Nitrate</td>
<td>6484-52-2</td>
<td>40% - 60%</td>
</tr>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>40% - 60%</td>
</tr>
<tr>
<td>Proprietary</td>
<td>None</td>
<td>1.00%* Trade Secret</td>
</tr>
<tr>
<td>Polymers (Film)</td>
<td>None</td>
<td>2.00% - 4.00%</td>
</tr>
</tbody>
</table>

The above chemicals are separated into compartments before activation of the cold pack. Compartment 1: Ammonium Nitrate (powder), Compartment 2: Water

The product contains the following toxic chemicals subject to the reporting requirements of Section 313 of Title III Emergency Planning and Community Right To Know Act of 1986 and 40 CFR.: AMMONIUM NITRATE

SECTION 4: FIRST AID MEASURES

DESCRIPTION OF FIRST AID MEASURES

GENERAL INFORMATION: During normal use of this article exposure to the chemical is not expected.

EYE CONTACT:
Eye contact is not expected to occur during normal use of the product.
If contact with the contents occurs, rinse immediately with plenty of water, also under the eyelids. Obtain medical attention if irritation persists.

SKIN CONTACT:
Prolonged or repeated exposure may cause:
Frostbite: signs/symptoms can include firm blanched areas, redness, pain, tissue destruction, swelling and scar tissue formation.
If contact with the contents occurs, wash off with soap and water

INHALATION:
No adverse health effects are expected from inhalation exposure.
Exposure to non-activated pack contents may cause shortness of breath, cough, and irritation to the respiratory tract.
Discard pack and move to area with adequate ventilation.

IF SWALLOWED:
Ingestion is not a likely route of exposure to this product.
Ingestion may cause: Irritation of gastrointestinal tissues: signs /symptoms can include pain, vomiting, abdominal tenderness, nausea, blood in vomitus and blood in feces.
Call a physician or Poison Control Centre immediately. If victim is conscious, rinse mouth with a small amount of water. Never give anything by mouth to a person who is unconscious or drowsy.

OTHER HEALTH HAZARD INFORMATION:
Exposure to the contents of the pack may cause eye and skin irritation. If pack breaks, discard and wash the affected area with soap and water.

SECTION 5: FIRE & EXPLOSION HAZARD DATA

GENERAL INFORMATION: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear.

FLASH POINT: N/D
AUTOIGNITION TEMPERATURE: N/D
EXTINGUISHING MEDIA: WATER
SPECIAL FIRE FIGHTING PROCEDURES: N/D
UNUSUAL FIRE AND EXPLOSION HAZARDS: N/D
HAZARDOUS DECOMPOSITION PRODUCTS: N/D
SPECIAL FIRE FIGHTING PROCEDURES:
Wear full protective clothing, including helmet, self-contained, positive pressure or pressure demand breathing apparatus, bunker coat and pants, bands around arms, waist and legs, face mask and protective covering for exposed areas of the head. These firefighting procedures are applicable in warehouse situations. Single units would not call for the above procedures.

UNUSUAL FIRE AND EXPLOSION HAZARDS:
Confinement at elevated temperatures or exposure to strong oxidizers may cause an explosion.

OSHA FIRE HAZARD CLASS: Not Determined
### SECTION 6: ACCIDENTAL RELEASE MEASURES

**PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES**

Wear suitable protective equipment.

Do not use combustible materials such as paper towels or sawdust to collect spill.

**SPILL AND LEAK PROCEDURES:**

Recommended clean-up procedures when compress is damaged before activation:
- Contain and collect with inert absorbent material and place in a suitable container for disposal, similar to the container material was supplied in.
- Do not use combustible materials such as paper towels or sawdust to collect spill. Contact with combustible material may cause fire.
- Comply with all federal, state and local regulations.

Recommended clean-up procedures when compress is damaged after activation:
- Spilled material should be collected appropriately and wash remainder with plenty of water. If spilled material enters a water course, inform the local authority.
- Place in a suitable container for disposal, similar to the container material was supplied in.

**ENVIRONMENTAL PRECAUTIONS:**

The substance is biodegradable. Harmful to aquatic organisms. Ensure spilled product does not enter drains, sewers, waterways, or confined spaces.

### SECTION 7: HANDLING & STORAGE

**PRECAUTIONS FOR SAFE HANDLING & STORAGE:**

Avoid contact with contents of product.

Handling: use appropriate protective clothing and equipment (see Section 8)

Storage: Store away from combustible material and reducing agents. Do not expose to high temperatures.

Packaging Materials: bulk, bags

**OTHER PRECAUTIONS:**

Recommended handling procedures when compress is damaged:
- Wear appropriate protective equipment. Avoid breathing vapors, fumes or dust.
- Avoid contact with skin, eyes and clothing. Avoid and control operations which create high vapor or dust concentrations.
- Do not ingest. Wash thoroughly after handling.
- Always keep in containers made of the same materials as the supply container.

### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

**PROTECTIVE GLOVES:** None required for normal use.

**RESPIRATORY PROTECTION:** No personal respiratory protective equipment normally required.

**EYE PROTECTION:** Eye contact is not expected to occur during normal use of the product.

**SKIN PROTECTION:** No adverse health effects are expected from skin contact. Protective gloves may be worn only in case of moist and sensitive hands.

**ENGINEERING CONTROLS:** No special ventilation normally required.

**OTHER PROTECTIVE CLOTHING OR EQUIPMENT:** N/A

For bulk processing, regular hand washing along with general body-covering clothing, safety goggles and gloves are Recommended as good industrial hygiene practice.

### SECTION 9: PHYSICAL/ CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Solid=White, Granules; Liquid=Hazy to Clear</td>
</tr>
<tr>
<td>Odor</td>
<td>Odorless</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>N/A</td>
</tr>
<tr>
<td>pH</td>
<td>N/A</td>
</tr>
<tr>
<td>Melting Point</td>
<td>170°C</td>
</tr>
<tr>
<td>Freezing Point</td>
<td>N/A</td>
</tr>
<tr>
<td>Boiling Point and Boiling Range</td>
<td>&gt;100°C</td>
</tr>
<tr>
<td>Flash Point</td>
<td>N/A</td>
</tr>
<tr>
<td>Evaporation Rate (Butyl Acetate = 1)</td>
<td>Very Soluble</td>
</tr>
<tr>
<td>Flammability</td>
<td>0</td>
</tr>
<tr>
<td>Vapor Pressure (mm Hg)</td>
<td>760MM HG @ 1000°C &gt;1</td>
</tr>
<tr>
<td>Vapor Density (AIR = 1)</td>
<td>N/D</td>
</tr>
<tr>
<td>Relative Density</td>
<td>1.7 g/cm³</td>
</tr>
<tr>
<td>Solubility</td>
<td>Solubility in water, g/100ml at 20°C: 200</td>
</tr>
<tr>
<td>Partition Coefficient</td>
<td>N/A</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>N/A</td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>&gt; 210°C</td>
</tr>
<tr>
<td>Viscosity</td>
<td>N/A</td>
</tr>
<tr>
<td>Specific Gravity (H₂O = 1)</td>
<td>N/A</td>
</tr>
</tbody>
</table>
SECTION 10: STABILITY AND REACTIVITY

STABILITY: Stable under proper storage conditions
CONDITIONS TO AVOID: Melts and decomposes when heated to extreme temperatures.
INCOMPATIBILITY (MATERIAL TO AVOID): strong base, strong acid, organic materials, chromates, zinc, compounds by copper, nickel and cobalt
HAZARDOUS DECOMPOSITION OR BY PRODUCTS: ammonium nitrate melts and decomposes when strongly heated, releasing toxic fumes (NON)
HAZARDOUS POLYMERIZATION: Not expected under prescribed storage and handling conditions. Decomposition may occur at extremely high temperatures.

SECTION 11: TOXICOLOGICAL INFORMATION

Routes of Exposure: Not expected under normal usage.
Eye or Skin Related Symptoms: Not expected under normal usage.
Eye: Eye irritation
Skin: Very Mild skin irritation
Acute Toxicity: not applicable
Chronic Effects of Long Term Exposure:
Chronic Toxicity: substance might lead to change in blood structure (formation of methaemoglobin)
Mutagenicity: no mutagenicity expected
Reproductive Toxicity: no reproductive toxicity expected
Teratogenicity: Not expected to be a teratogen.
Epidemiological Data: epidemiological data indicates no effects in workers exposed to 10mg/m³ for a year or longer
Numerical measures of toxicity:
Oral: LD50 rat: 2300mg/kg
Dermal: LD50 rat: expected 2000mg/kg
Inhalation: 4hrs LC50 rat: expected 89mg/l
Carcinogenicity:
NTP: NO NCI-Life time study has been carried out
IARC: NO IARC monograph has been published
OSHA: Not a regulated carcinogen

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICITY:
96 h LCSO (for fish): 10-100mg/l
48h EC50 (for Daphnia): 10-100 mg/l
BIODEGRADABILITY: Readily biodegradable.
BIOACCUMULATION: Log P 0, no bioaccumulation potential.
MOBILITY: Highly water soluble. It is not absorbed by soil.
OTHER ADVERSE EFFECTS: None found

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD:
Responsibility of the receiver to have knowledge of national and local regulations. Methods of Disposal: The substance is biodegradable. Disposal according to the local legislation.

SECTION 14: TRANSPORT INFORMATION

UN number and proper shipping name: UN1942, Ammonium Nitrate
A limited quantity may be renamed “consumer commodity” and re-classed as ORM•D. Please consult 49CFR 17Y152 for additional information.
Transport hazard class(es): 5.1
Packing group: III
Environmental hazards: Avoid release to the environment in circumstances different to normal use.
Special precautions: Heating may cause violent combustion or explosion. Decomposes on heating - >170°C. This produces toxic fumes. The substance is a strong oxidant. It reacts with acids and combustible and reducing materials.
UPDATE: JULY 1, 2015

SECTION 15: REGULATORY INFORMATION

US FEDERAL REGULATIONS
TSCA (TOXIC SUBSTANCE CONTROL ACT): Not Regulated
CERCLA/SARA - HAZARDOUS SUBSTANCES: Not Applicable
302 EXTREMELY HAZARDOUS SUBSTANCES EPCRA QRS: Not Listed
302 EXTREMELY HAZARDOUS SUBSTANCES TPQS: Not Listed
CERCLA/SARA - 313 - EMISSION REPORTING: Not Listed

US STATE REGULATIONS
CALIFORNIA - 8 CCR SECTION 339 - DIRECTOR'S LIST OF HAZARDOUS SUBSTANCES: Not Listed

INTERNATIONAL REGULATIONS
Canadian WHMIS Classification: Not Listed
Canadian WHMIS - INGREDIENT DISCLOSURE LIST: Not Listed
Canadian Environmental Protection Act (CEPA) information: Not Listed
Germany - WATER HAZARD CLASS: Not Listed

SECTION 16: OTHER INFORMATION

Date of Preparation/Last Revision: 7/1/15

FURTHER INFORMATION: This SDS has been prepared in accordance with:

DISCLAIMER: The information provided in this Safety Data Sheet has been compiled, in good faith, from our experience and data presented in various technical publications. An SDS for a substance is not primarily intended for use by the general consumer, focusing instead on the hazards of working with the material in an occupational setting. It is believed to be accurate and represents the best information currently available. HOWEVER, Coldstar International MAKES NO WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OF ANY OTHER TYPE, EXPRESSED OR IMPLIED, WITH RESPECT TO PRODUCTS DESCRIBED OR DATA OR INFORMATION PROVIDED, AND WE ASSUME NO LIABILITY RESULTING FROM THE USE OF SUCH PRODUCTS, DATA OR INFORMATION. Users should make their own investigations to determine the suitability of the information for their particular purposes, and the user assumes all risk arising from their use of the material. The user is required to comply with all laws and regulations relating to the purchase, use, storage and disposal of the material, and must be familiar with and follow generally accepted safe handling procedures. In no event shall Coldstar International be liable for any claims, losses, or damages of any individual or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Coldstar International has been advised of the possibility of such damages. We reserve the right to update MSDS sheets from time to time as new information becomes available. It is the responsibility of the user to verify that they have the latest revision available.

Manufactured By/Contact Source for Additional Information

<table>
<thead>
<tr>
<th>Coldstar International</th>
<th>Phone Number: 423-538-5551</th>
</tr>
</thead>
<tbody>
<tr>
<td>501 Industrial Park Rd</td>
<td>Fax Number: 423-538-3030</td>
</tr>
<tr>
<td>Piney Flats, TN 37686</td>
<td>Email Address: <a href="mailto:customerservice@coldstarinternational.com">customerservice@coldstarinternational.com</a></td>
</tr>
<tr>
<td>United States of America</td>
<td>Preparer’s Name: ColdStar International, Inc.</td>
</tr>
</tbody>
</table>