



**Telephone:** (845) 365-8200 \* **Website:** www.dynarex.com  
**Toll Free:** (888) DYNAREX \* **Website:** www.thcnet.com  
**Fax:** (845) 365-8201

## Material Safety Data Sheet

**Product Name:** Instant Cold Compress  
**Product Code:** 4511-4512-4515  
**Responsible Party:** Dynarex Corporation  
10 Glenshaw Street  
Orangeburg, NY 10941

For further information contact MSDS Coordinator  
8am - 5pm Mon - Fri: 888-DYNAREX or 845-365-8200

### EMERGENCY OVERVIEW

**Emergency Telephone Numbers:**  
Local Emergency Center

**Health Hazards:** Dry chemical of cold compress is an eye and skin irritant. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling.

**Physical Hazards:** Dry chemical is an oxidizer. Oxidizers can support combustion. Contact may increase flammability of other materials. Avoid contact with clothing and other combustible material.

< **Physical Form:** Solid/Liquid  
< **Appearance:** White solid in water bag  
< **Odor:** None

NFPA HAZARD CLASS:	<b>Health:</b>	1 (Slight)
	<b>Flammability:</b>	0 (Least)
	<b>Reactivity:</b>	3 (High)
	<b>Other:</b>	OXY (Oxidizer)



**Telephone:** (845) 365-8200 \* **Website:** www.dynarex.com  
**Toll Free:** (888) DYNAREX \* **Website:** www.thcnet.com  
**Fax:** (845) 365-8201

**2. COMPOSITION/INFORMATION ON INGREDIENTS**

HAZARDOUS COMPONENTS	% Weight	EXPOSURE GUIDELINE		
		Limits	Agency	Type
Ammonium Nitrate CAS# 6484-52-2	40-70	Not Established		
OTHER COMPONENTS	% Weight	EXPOSURE GUIDELINE		
		Limits	Agency	Type
Water CAS# 7732-18-5	30-60	Not Established		

Note: State, local or other agencies or advisory groups may have established more stringent limits. Consult an industrial hygienist or similar professional, or you local agencies, for further information.

**3. HAZARDS IDENTIFICATION**

**POTENTIAL HEALTH EFFECTS:**

**Eye:** Eye irritant. Contact may cause stinging, watering, redness, and swelling.

**Skin:** Skin irritant. Contact may cause redness, itching, burning and skin damage. No harmful effects from skin absorption have been reported.

**Inhalation (Breathing):** Low to moderate degree of toxicity by inhalation.

**Ingestion (Swallowing):** Low to moderate degree of toxicity by ingestion.

**Signs and Symptoms:** Effects of overexposure may include irritation of the nose, throat and digestive tract; coughing, nausea, vomiting, diarrhea, abdominal pain, breathing difficulties, and blood disorders (methemoglobinemia).

**Cancer:** No data available.

**Target Organs:** No data available.

**Developmental:** Inadequate data available for this material.

**Other Comments:** This material contains nitrate salts. Nitrates may be reduced by intestinal bacteria to nitrite. When absorbed, nitrites may result in effects on the blood (methemoglobinemia) and blood vessels (vasodilating and a fall in blood pressure). Symptoms of toxicity may include headache, fainting, fatigue, cyanosis, confusion, irregular heartbeats, and possible respiratory paralysis. Pre-existing heart disease may be aggravated by exposure to nitrates.



**Telephone:** (845) 365-8200 \* **Website:** www.dynarex.com  
**Toll Free:** (888) DYNAREX \* **Website:** www.thcnet.com  
**Fax:** (845) 365-8201

**Pre-Existing Medical Conditions:** Conditions aggravated by exposure may include heart, blood vessel and skin disorders.

#### 4. FIRST AID MEASURES

**Eye:** Move victim away from exposure and into fresh air. If irritation or redness develops, flush eyes with clean water and seek immediate medical attention. For direct contact, immediately hold eyelids apart and flush the affected eye(s) with clean water for at least 15 minutes. Seek medical attention.

**Skin:** Remove contaminated shoes and clothing, and flush affected area(s) with large amounts of water. If skin surface is damaged, apply a clean dressing and seek medical attention. If skin surface is not damaged, cleanse affected area(s) thoroughly by washing with mild soap or water. If irritation or redness develops, seek medical attention.

**Inhalation (Breathing):** If respiratory symptoms or other symptoms of exposure develop, move victim away from source of exposure and into fresh air. If symptoms persist, seek medical attention. If victim is not breathing, clear airway and immediately begin artificial respiration. If breathing difficulties develop, oxygen should be administered by qualified personnel. Seek immediate medical attention.

**Ingestion (Swallowing):** If swallowed, seek emergency medical attention. If victim is drowsy or unconscious and vomiting, place on left side with the head down and do not give anything by mouth. If victim is conscious and alert and ingestion occurred within the last hour, vomiting should be induced for ingestion of large amounts (more than 5 ounces in an adult) under direction from a physician or poison center. If possible, do not leave victim unattended and observe closely for adequacy of breathing.

**Note to Physicians:** Nitrates in large doses may cause significant vasodilation and hypotension. Pre-existing ischemic heart disease may be aggravated by these effects. In large ingestions nitrates may cause methemoglobinemia. Methemoglobinemia should be suspected if cyanosis occurs. Methylene blue (1-2 mg/kg I.V. over several minutes) is an effective antidote for symptomatic methemoglobinemia.

#### 5. FIRE FIGHTING MEASURES

**Flammable Properties:** Flash Point: None  
OSHA Flammability Class: Not applicable  
LEL/UEL: No data  
Autoignition Temperature: No data

**Unusual Fire & Explosion Hazards:** Oxidizer. The dry chemical of this material is an oxidizer and may increase inflammability of any combustible substance. It is



**Telephone:** (845) 365-8200 \* **Website:** www.dynarex.com  
**Toll Free:** (888) DYNAREX \* **Website:** www.thcnet.com  
**Fax:** (845) 365-8201

the nature of oxidizers to provide their own oxygen source; smothering a fire may be ineffective. Nitrate salts support combustion under certain conditions. Ammonium nitrate is capable of detonation if heated under confinement or if subjected to strong shocks. Organic or other easily oxidizable matter can sensitize it to a more readily explodable state. Do not allow product to evaporate to dryness, especially in contact with combustible materials.

**Extinguishing Media:** Use water only. Do not use dry chemical, carbon dioxide or foam.

**Fire Fighting Instructions:** For fires beyond the incipient stage, emergency responders in the immediate hazard area should wear bunker gear. When the potential chemical hazard is unknown, in enclosed or confined spaces, or when explicitly required by DOT, a self-contained breathing apparatus should be worn. In addition, wear other appropriate protective equipment as conditions warrant (see Section 8). Isolate immediate hazard area and keep unauthorized personnel out. Stop spill/release if it can be done with minimal risk. Move undamaged containers from immediate hazard area if it can be done with minimal risk. Water spray may be useful in minimizing or dispersing vapors. Cool equipment exposed to fire with water, if it can be done with minimal risk.

## 6. ACCIDENTAL RELEASE MEASURES

The dry chemical of this material is an oxidizer. Keep all sources of ignition and hot metal surfaces away from spill/release. The use of explosion-proof equipment is recommended.

Stay upwind and away from spill/release. Notify person down wind of spill/release, isolate immediate hazard area and keep unauthorized personnel out. Stop spill/release if it can be done with minimal risk. Wear appropriate protective equipment including respiratory protection as conditions warrant (see Section 8). Prevent spilled material from entering sewers, storm drains, other unauthorized treatment drainage systems, and natural waterways. Dike far ahead of spill for later recovery or disposal. Spilled material may be absorbed into an appropriate absorbent material. Notify appropriate federal, state, and local agencies. Immediate cleanup of any spill is recommended.

## 7. HANDLING AND STORAGE

**Handling:** Do not enter confined spaces such as tanks or pits without following proper entry procedures such as ASTM D-4276 and 29CFR 1910.146. The use of appropriate respiratory protection is advised when concentrations exceed any established exposure limits (see Section 2 and 8). Wash thoroughly after handling. Do not wear contaminated clothing or shoes. Use good personal hygiene practice.

"Empty" containers retain residue and may be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, or other sources of ignition. They may explode and cause injury or



**Telephone:** (845) 365-8200 \* **Website:** www.dynarex.com  
**Toll Free:** (888) DYNAREX \* **Website:** www.thcnet.com  
**Fax:** (845) 365-8201

death. Container should be disposed in an environmentally safe manner and in accordance with governmental regulations.

Before working on or in tanks which contain or have contained this material, refer to OSHA Regulations, ANSI Z49.1 and other governmental and industrial references pertaining to cleaning, welding, or other contemplated operations.

**Storage:** Use and store this material in cool, dry, well-ventilated areas away from heat and all sources of ignition. Post area "No Smoking or Open Flame." Solution is corrosive to copper, copper alloys, lead, and zinc. Store to avoid contact with incompatible materials such as ordinary combustibles, flammable liquids, greases, and those materials, including other oxidizers, that could react with the oxidizer or catalyze its decomposition (see Section 10). Prohibit accumulation of combustible waste in storage areas. Combustible construction materials that may be in contact with oxidizers shall be protected with a compatible coating to prevent impregnation of the combustible materials by the oxidizers. Protect container(s) against physical damage.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Engineering controls:** If current ventilation practices are not adequate to minimize exposure, additional ventilation or exhaust systems may be required.

### Personal Protective Equipment (PPE):

**Respiratory:** A NIOSH/MSHA approved air purifying respirator with a N95 filter may be used under conditions where airborne concentrations are expected to exceed exposure limits (see Section 2). Protection provided by air purifying respirators is limited (see manufacturer's respirator selection guide). Use a positive pressure air supplied respirator if there is potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection. A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

**Skin:** The use of gloves impermeable to the specific material handled is advised to prevent skin contact, possible irritation, absorption, and skin damage (see glove manufacturer literature for information on permeability). Depending on conditions of use, apron and/or arm covers may be necessary.

**Eye/Face:** Approved eye protection to safeguard against potential eye contact, irritation, or injury is recommended. Depending on conditions of use, a face shield may be necessary.

**Other Protective Equipment:** A source of clean water should be available in the work area for flushing eyes and skin. Impervious clothing should be worn as needed.





Telephone: (845) 365-8200 \* Website: www.dynarex.com  
Toll Free: (888) DYNAREX \* Website: www.thcnet.com  
Fax: (845) 365-8201

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Note: Unless otherwise stated, values are determined at 20°C (68°F) and 760 mm Hg (1 atm).

Flash Point: None  
Flammable/Explosive Limits (%): LEL/UEL: No data  
Autoignition Temperature: No data  
Appearance: White solid in water bag  
Physical State: solid/Liquid  
Odor: None  
pH: No data  
Vapor Pressure (mm Hg): No data  
Boiling Point: No data  
Freezing/Melting Point: No data  
Solubility in Water: 100%  
Specific Gravity: approx 1.3  
Evaporation Rate (nBuAc=1): No data

## 10. STABILITY AND REACTIVITY

**Chemical Stability:** Stable under normal conditions of storage and handling. Dry chemical is an oxidizer and may promote combustion in other materials.

**Conditions To Avoid:** This material may be an oxidizer. Do not heat above 250°F. Do not let dry chemical or solution dry or crystallize in contact with organic, reactive, or combustible materials (see Sections 7).

**Incompatible Materials:** Avoid contact with reactive, combustible, or organic materials, such as wood, grain, organic chemicals, acids, corrosive liquids, sulfur, flammable liquids, chlorates, permanganates, finely divided materials, charcoal, coke, cork, or sawdust. Avoid contact with other oxidizers. Contact with alkaline materials may liberate ammonia.

**Hazardous Decomposition Products:** Material will not burn, but if involved in a fire, oxides of nitrogen may be generated. Exposure to heat may liberate ammonia fumes.

**Hazardous Polymerization:** Will not occur.

## 11. TOXICOLOGICAL INFORMATION

No definitive information available on carcinogenicity, mutagenicity, target organs or developmental toxicity.

## 12. DISPOSAL CONSIDERATIONS



Telephone: (845) 365-8200 \* Website: www.dynarex.com  
 Toll Free: (888) DYNAREX \* Website: www.thcnet.com  
 Fax: (845) 365-8201

This material, if discarded as produced, may be a RCRA "characteristic" hazardous waste due to the characteristic(s) of ignitability (D001). If the material is spilled to soil or water, characteristic testing of the contaminated materials is recommended. To assure proper disposal, consult with state and local regulations and disposal authorities.

**13. TRANSPORT INFORMATION**

Hazard Class or Division: Not classified as hazardous.

**14. REGULATORY INFORMATION**

This material contains the following chemicals subject to the reporting requirements of **SARA 313** and 40 CFR 372.

COMPONENT	CAS NUMBER
Ammonia (includes anhydrous ammonia and aqueous ammonia from water dissociable ammonium salts and other sources; 10 percent of total aqueous ammonia is reportable under this listing)	7446-41-7
Water dissociable nitrate compounds	None

**Warning:** This material contains the following chemicals which are known to the State of California to cause cancer, birth defects or other reproductive harm, and are subject to the requirements of **California Proposition 65** (CA Health & Safety Code Section 25249.5)

--None Known--

This material has not been identified as a carcinogen by NTP, IARC, or OSHA.

**EPA (CERCLA) Reportable Quantity:** --None--

**15. DOCUMENTARY INFORMATION**

Issue Date: 02/12/09  
 Previous Issue Date: None  
 Product Code: Various Private Label

**16. DISCLAIMER OF EXPRESSED AND IMPLIED WARRANTIES**

The information in this document is believed to be correct as of the date issued. **HOWEVER, NO WARRANTY OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR ANY**



Telephone: (845) 365-8200 \* Website: [www.dynarex.com](http://www.dynarex.com)  
Toll Free: (888) DYNAREX \* Website: [www.thcnet.com](http://www.thcnet.com)  
Fax: (845) 365-8201

**OTHER WARRANTY IS EXPRESSED OR IS TO BE IMPLIED REGARDING THE ACCURACY OR COMPLETENESS OF THIS INFORMATION, THE RESULTS TO BE OBTAINED FROM THE USE OF THIS INFORMATION OR THE PRODUCT, THE SAFETY OF THIS PRODUCT, OR THE HAZARDS RELATED TO ITS USE.** This information and product are furnished on the condition that the person receiving them shall make his own determination as to the suitability of the product for his particular purpose and on the condition that he assumes the risk of his use thereof.

Prepared By: Dynarex Corp.  
Dated: February 2009