SAFETY DATA SHEET

Product Description: instant cold packs

SHANGHAI INTCO MEDICAL SUPPLY CO., LTD

www.intcomedical.com

SAFETY DATA SHEET

Instant cold pack

SECTION 1 – IDENTIFICATION

Product Identifier: Instant cold pack

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

Chemical Family: Ammonium salt.

Product Identifier: Instant Cold Compress with ammonium nitrate

Manufacturer Name: Shanghai Intco Medical Supply Co., Ltd.

Manufacturer Address: No. 1299, Hubin Rd, Fengxian Shanghai, CHINA 201417

Manufacturer Phone Number: +86 021 57451159-683

Emergency Phone Number: +86 021-57451159

SECTION 2 – HAZARDS IDENTIFICATION

EMERCENCY OVERVIEW

This product may be considered a 'manufacture 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 result in chemicals mixing inside the cold pack. The reaction that occurs in endothermic, causing the solution to become cold. Prolonged contact may cause numbness. Causes little or no limitation.

POTENTIAL HEALTH EFFECTS

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

R**outes 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 chest, a sore throat and cough. Imitating 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 may 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 system, causing methemoglobinemia. Large doses can cause shock, convulsions, coma and eventual death.

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.

Conditions aggravated by overexposure: Pre-existing skin, eye and respiratory disorders.

Carcinogenic status: See TOXICOLOGICAL INFORMATION, section 11.

Additional health hazards: None known or reported by the manufacturer. See TOXICOLOGICAL INFORMATION, section 11.

Potential environmental effects: See ECOLOGICAL INFORMATION, section 12.

SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	CAS #	%(weight)	ACGIH TLV		OSHA	
			TWA	STEL	PEL	STEL
Ammonium Nitrate	6484-52-2	40-70	N/Av	N/Av	N/Av	N/Av
Water	7732-18-5	30-60	N/Av	N/Av	N/Av	N/Av

SECTION 4 – FIRST-AID MEASURES

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 had 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 15minutes, lifting upper and lower eyelids occasionally. 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, and then give one to two glasses of water to drink. Never give anything by mouth to an unconscious person. Seek immediate medical attention/advice.

Note to Physicians: Nitrates in large doses may cause significant vasodilatation 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.

SECTION 5 – FIRE-FIGHTING MEASURES

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 CFR1910,1200): Not flammable under normal conditions of handing.

Flash Point: N/ Ap

Flash Point Method: N/ Ap

Auto-ignition Temperature: N/ Ap

Lower flammable limit (% by vol.): N/ Ap

Upper flammable limit (% by vol.): N/ Ap

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

Strong oxidizer which will promote combustion. Will accelerate combustible and increase the risk of fire and explosion in combustible or flammable materials.

Flame projection length: N/ Ap

Flashback observed: N/ Ap

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 area. 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 (NO_x).

NFPA Rating:

0-Minimal	1-slight	2-Moderate	3-Serious	4-severe
Health:1	**Flammability:0**	**Instablity: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 contained 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-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 sea dust.

Special spill response procedures: In case of a transportation accident, seek help from the local national response center.

SECTION 7 – HANDLING AND STORAGE

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

Recommended handing 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.

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/PERSONAL PROTECTION

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

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 under normal condition of handling.

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.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Physical Form: Solid/liquid

Appearance: White solid in water bag

Upper/lower flammability or explosive limits: No data

Odor: None

Vapor pressure: No data

Odor threshold: N/A

pH: No data

Specific density: 1.3

Melting point/freezing point:

Solubility in water: 100%

Initial boiling point and boiling range: No data

Flash point: None

Evaporation rate (nBuAc=1): No data

Auto-ignition temperature: No data

Viscosity: No data

SECTION 10 – STABILITY AND REACTIVITY

Stability and reactivity: Stable under the recommended storage and handing conditions prescribed.

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

Reactivity: No information found..

Conditions to Avoid: Incompatible materials, dust generation.

Incompatibilities with Other 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 urea.

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.

Ingredients	LC_{50}(4hr)	LD_{50}	
	Inh, rat	oral	dermal
Ammonium nitrate	> 88800 mg/m^3	2217mg/Kg (rat)	N/Av

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 materials: 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 vapor) 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 CFR261. It is the responsibility of the waste generator to determine the proper waste identification and disposal method.

SECTION 14 – TRANSPORT INFORMATION

Regulatory Information	**UN Number**	**Shipping Name**	**class**	**Packing group**	**Label**
TDG	UN1942	AMMONIUM NITRATE	5.1	III	
TDG Additional information	Within Canada only, this product may be shipped according to the 500Kg 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.				
49CFR/DOT	UN1942	AMMONIUM NITRATE	Limited Quantity	III	

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 Patr 172.315				
ICAO/IATA	UN1942	AMMONIUM NITRATE	5.1	III	
ICAO/IATA Additional information	Refer to ICAO/IATA pack instruction: Y516, 616 or 518. Review all state and operator Variations, prior to shipping this material.				

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 regulation (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, Extreme Hazardous Substances, 40 CFR 355: No extremely Hazardous Substances are present in this material.

SARA TITLE Ⅲ: Sec.311 and 312, MSDS Requirements, 40CFR370 Hazard Classed: 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 minimums 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 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

HMIS Rating:

*-Chronic hazard	0-Minimal	1-Slight	2-Moderate	3-Serious	4-Severe
Health:1		**Flammability:0**		**Reactivity:3**	

Legend:

ACGIH: American Conference of Governmental Industrial Hygienists

CAS: Chemical Abstracts Service

CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act of 1980.

DOT: Department of Transportation

DSL: the Domestic Substances List of Canada

EC: European Commission

EPA: Environmental Protection Agency

HMIS: Hazardous Substances Data Bank

IARC: International Agency for Research on Cancer

Inh: Inhalation

IATA: International Air Transport Association

LC: Lethal Concentration

LD_{50}: Lethal dose, 50 percent kill

MA: Massachusetts

MAC: Maximum allowable concentration

MSHA: Mine Safety and Health Administration

N/Ap: Not Applicable

N/Av: Not Available

NFPA: National Fire Protection Association

NIOSH: US National Institute for Occupational Safety and Health

NTP: US National Toxicology Program

OSHA: US Occupational Safety and Health

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

Issue Time: 2015-06-10

Issue Department: Technical department

Data review unit:

Modification record:

Notice to reader

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