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ID# 277892 880060  
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MATERIAL SAFETY DATA SHEET 277926

BAXTER HEALTHCARE CORPORATION  
PHARMASEAL DIVISION  
608 HIGHWAY 24 WEST  
MOBERLY, MO 65270

**BIN#353**

EMERGENCY CONTACT:  
(615) 366-2000

SUBSTANCE IDENTIFICATION

SUBSTANCE: KWIK KOLD REGULAR

TRADE NAMES/SYNONYMS:  
CATALOG # 107; OHSD519

CHEMICAL FAMILY:  
MIXTURE, AQUEOUS

INORGANIC SALT

CERCLA RATINGS (SCALE 0-3): HEALTH=2 FIRE=0 REACTIVITY=3 PERSISTENCE=0  
NFPA RATINGS (SCALE 0-4): HEALTH=0 FIRE=0 REACTIVITY=3

COMPONENTS AND CONTAMINANTS

COMPONENT: AMMONIUM NITRATE PERCENT: 49.0  
CAS# 6484-52-2

COMPONENT: WATER PERCENT: 51.0

EXPOSURE LIMITS:  
NO OCCUPATIONAL EXPOSURE LIMITS ESTABLISHED BY OSHA, ACGIH, OR NIOSH.

PHYSICAL DATA

DESCRIPTION: LIQUID. BOILING POINT: NOT AVAILABLE  
MELTING POINT: NOT AVAILABLE SPECIFIC GRAVITY: NOT AVAILABLE  
VAPOR PRESSURE: NOT AVAILABLE EVAPORATION RATE: NOT AVAILABLE  
PH: NOT AVAILABLE SOLUBILITY IN WATER: NOT AVAILABLE  
ODOR THRESHOLD: NOT AVAILABLE VAPOR DENSITY: NOT AVAILABLE  
SOLVENT SOLUBILITY: NOT AVAILABLE

FIRE AND EXPLOSION DATA

FIRE AND EXPLOSION HAZARD:  
NEGLECTIBLE FIRE HAZARD WHEN EXPOSED TO HEAT OR FLAME.  
FLASH POINT: NOT AVAILABLE UPPER EXPLCSIVE LIMIT: NOT AVAILABLE

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LOWER EXPLOSIVE LIMIT: NOT AVAILABLE AUTOIGNITION TEMP.: NOT AVAILABLE

**FIREFIGHTING MEDIA:**  
WATER ONLY, NO DRY CHEMICAL, CARBON DIOXIDE OR HALON  
(1990 EMERGENCY RESPONSE GUIDEBOOK, DOT P 5800.5).

FOR LARGER FIRES, FLOOD AREA WITH WATER FROM A DISTANCE  
(1990-EMERGENCY RESPONSE GUIDEBOOK, DOT P. 5800.5).

**FIREFIGHTING:**  
DO NOT MOVE CARGO OR VEHICLE IF CARGO HAS BEEN EXPOSED TO HEAT. APPLY COOLING WATER TO SIDES OF CONTAINERS EXPOSED TO FLAMES UNTIL WELL AFTER FIRE IS OUT. FOR MASSIVE FIRE IN CARGO AREA, USE UNMANNED HOSE HOLDER OR MONITOR NOZZLES; IF THIS IS IMPOSSIBLE, WITHDRAW FROM AREA AND LET FIRE BURN. ISOLATE FOR 1/2 MILE IN ALL DIRECTIONS IF TANK, RAIL CAR OR TANK TRUCK IS INVOLVED IN FIRE (1990 EMERGENCY RESPONSE GUIDEBOOK, DOT P 5800.5; GUIDE PAGE 431).

FLOOD WITH WATER. COOL CONTAINERS WITH FLOODING AMOUNTS OF WATER FROM AS FAR A DISTANCE AS POSSIBLE. IF FIRE IS UNCONTROLLABLE, EVACUATE FOR A RADIUS OF 5000 FEET.

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**TOXICITY**

**AMMONIUM NITRATE:**  
TOXICITY DATA: 2217 MG/KG URAL-RAT LD50.  
CARCINOGEN STATUS: NONE.  
LOCAL EFFECTS: IRRITANT- INHALATION, SKIN, EYE.  
ACUTE TOXICITY LEVEL: MODERATELY TOXIC BY INGESTION.  
TARGET EFFECTS: POISONING MAY AFFECT THE BLOOD.

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**HEALTH EFFECTS AND FIRST AID**

**INHALATION:**

**AMMONIUM NITRATE:**

**IRRITANT-**

ACUTE EXPOSURE- MAY BE IRRITATING TO THE RESPIRATORY TRACT AND CAUSE SORE THROAT, COUGHING, DIFFICULT BREATHING, SEVERE LUNG CONGESTION, ACIDOSIS, AND METHEMOGLOBINEMIA. PULMONARY EDEMA AND CHEMICAL PNEUMONITIS MAY BE DELAYED.

CHRONIC EXPOSURE- PROLONGED OR REPEATED EXPOSURE MAY CAUSE AN ALLERGIC RESPONSE IN THE RESPIRATORY TRACT.

**FIRST AID-** REMOVE FROM EXPOSURE AREA TO FRESH AIR IMMEDIATELY. IF BREATHING HAS STOPPED, PERFORM ARTIFICIAL RESPIRATION. KEEP PERSON WARM AND AT REST. TREAT SYMPTOMATICALLY AND SUPPORTIVELY. GET MEDICAL ATTENTION IMMEDIATELY.

**SKIN CONTACT:**

**AMMONIUM NITRATE:**

**IRRITANT-**

ACUTE EXPOSURE- MAY BE IRRITATING CAUSING REDNESS, PAIN AND POSSIBLY BURNS.  
CHRONIC EXPOSURE- REPEATED OR PROLONGED CONTACT WITH IRRITANTS MAY CAUSE DERMATITIS.

**FIRST AID-** REMOVE CONTAMINATED CLOTHING AND SHOES IMMEDIATELY. WASH AFFECTED AREA WITH SOAP OR MILD DETERGENT AND LARGE AMOUNTS OF WATER UNTIL NO

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EVIDENCE OF CHEMICAL REMAINS (APPROXIMATELY 15-20 MINUTES). GET MEDICAL ATTENTION IMMEDIATELY.

EYE CONTACT:  
AMMONIUM NITRATE:  
IRRITANT.

ACUTE EXPOSURE- MAY BE IRRITATING CAUSING REDNESS, PAIN AND POSSIBLY BURNS.  
CHRONIC EXPOSURE- REPEATED OR PROLONGED CONTACT WITH IRRITANTS MAY CAUSE CONJUNCTIVITIS.

FIRST AID- WASH EYES IMMEDIATELY WITH LARGE AMOUNTS OF WATER OR NORMAL SALINE, OCCASIONALLY LIFTING UPPER AND LOWER LIDS, UNTIL NO EVIDENCE OF CHEMICAL REMAINS (APPROXIMATELY 15-20 MINUTES). GET MEDICAL ATTENTION IMMEDIATELY.

INGESTION:

AMMONIUM NITRATE:

ACUTE EXPOSURE- MAY CAUSE MILD GASTRIC IRRITATION, ABDOMINAL SPASMS, NAUSEA, AND FAINTNESS. LARGE DOSES MAY CAUSE SYSTEMIC ACIDOSIS AND METHEMOGLOBINEMIA WITH CYANOSIS. RARELY INORGANIC NITRATES MAY BE CONVERTED TO NITRITES BY NITRATE-REDUCING BACTERIA IN THE DIGESTIVE TRACT, RESULTING IN METHEMOGLOBINEMIA.  
CHRONIC EXPOSURE- REPEATED OR PROLONGED EXPOSURE TO NITRATES MAY CAUSE ANEMIA, NEPHRITIS, AND POSSIBLY METHEMOGLOBINEMIA.

FIRST AID: TREAT SYMPTOMATICALLY AND SUPPORTIVELY. IF PERSON IS CONSCIOUS AND ABLE TO SWALLOW, GIVE LARGE AMOUNTS OF WATER OR MILK TO DILUTE SUBSTANCE. GET MEDICAL ATTENTION IMMEDIATELY. IF VOMITING OCCURS, KEEP HEAD BELOW HIPS TO HELP PREVENT ASPIRATION.

#### REACTIVITY

REACTIVITY:

STABLE UNDER NORMAL TEMPERATURES AND PRESSURES.

INCOMPATIBILITIES:-

AMMONIUM NITRATE:

ACETIC ACID: IGNITES WHEN HEATED.

ACETIC ANHYDRIDE + NITRIC ACID: FORMS EXPLOSIVE COMPOUND.

ACIDS: MAY REACT EXOTHERMICALLY.

ALKALIS (STRONG): REACTS WITH EVOLUTION OF AMMONIA GAS.

AMMONIUM SULFATE + POTASSIUM: EXPLODES ON CONTACT.

CALCIUM NITRATE + FORMANIDE + WATER: DETONABLE MIXTURE.

CHLORIDE SALTS: INCREASED SENSITIVITY TOWARD EXPLOSIVE DECOMPOSITION.

COMBUSTIBLE MATERIALS: VIOLENT OR EXPLOSIVE REACTION.

CYANOQUANIDINE: FORMS AN EXPLOSIVE MIXTURE.

MAGNESIUM + COPPER SULFATE + POTASSIUM CHLORATE + WATER: FORMS AN UNSTABLE COMPOUND.

METALS (POWDERED): VIOLENT OR EXPLOSIVE REACTION.

METAL SALTS: IGNITION.

ORGANIC FUELS: FORMS A SHOCK-SENSITIVE MIXTURE.

ORGANIC MATERIALS: FORMS AN EXPLOSIVE MIXTURE.

PHOSPHOROUS: IGNITION OR EXPLOSION.

POTASSIUM OR SODIUM-POTASSIUM ALLOY: FORMS A SHOCK-SENSITIVE MIXTURE.

POTASSIUM NITRITE: INCANDESCENT REACTION.

POTASSIUM PERMANGANATE: EXPLOSION HAZARD.

REDUCING AGENTS: VIOLENT OR EXPLOSIVE REACTION.

SODIUM: FORMS AN EXPLOSIVE COMPOUND.

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SODIUM HYPOCHLORITE: POSSIBLE VIOLENT REACTION.  
SODIUM PERCHLORATE: FORMS AN EXPLOSIVE MIXTURE.  
SULFUR: FORMS A SHOCK-SENSITIVE MIXTURE.  
TRINITROANISOLE: FORMS AN EXPLOSIVE MIXTURE.  
UREA: EXPLOSIVE REACTION.  
ZINC + AMMONIUM CHLORIDE + BARIUM NITRATE + WATER: POSSIBLE IGNITION.

**DECOMPOSITION:**  
THERMAL DECOMPOSITION PRODUCTS MAY INCLUDE TOXIC AND CORROSIVE FUMES OF AMMONIA AND TOXIC OXIDES OF NITROGEN.

**POLYMERIZATION:**  
HAZARDOUS POLYMERIZATION HAS NOT BEEN REPORTED TO OCCUR UNDER NORMAL TEMPERATURES AND PRESSURES.

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#### STORAGE AND DISPOSAL

OBSERVE ALL FEDERAL, STATE AND LOCAL REGULATIONS WHEN STORING OR DISPOSING OF THIS SUBSTANCE. FOR ASSISTANCE, CONTACT THE DISTRICT DIRECTOR OF THE ENVIRONMENTAL PROTECTION AGENCY.

#### \*\*STORAGE\*\*

STORE AWAY FROM INCOMPATIBLE SUBSTANCES.

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#### SPILL AND LEAK PROCEDURES

**OCCUPATIONAL SPILL:**  
KEEP COMBUSTIBLES (WOOD, PAPER, OIL, ETC.) AWAY FROM SPILLED MATERIAL. DO NOT TOUCH SPILLED MATERIAL. STOP LEAK IF YOU CAN DO IT WITHOUT RISK. USE WATER SPRAY TO REDUCE VAPORS. FOR SMALL SPILLS, TAKE UP ABSORBENT MATERIAL AND PLACE INTO CONTAINERS FOR LATER DISPOSAL. FOR LARGER SPILLS, DIKE SPILL FOR LATER DISPOSAL. KEEP UNNECESSARY PEOPLE AWAY. ISOLATE HAZARD AREA AND DENY ENTRY.

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#### PROTECTIVE EQUIPMENT

**VENTILATION:**  
PROVIDE LOCAL EXHAUST OR GENERAL DILUTION VENTILATION SYSTEM.

**RESPIRATOR:**  
THE FOLLOWING RESPIRATORS ARE RECOMMENDED BASED ON INFORMATION FOUND IN THE PHYSICAL DATA, TOXICITY AND HEALTH EFFECTS SECTIONS. THEY ARE RANKED IN ORDER FROM MINIMUM TO MAXIMUM RESPIRATORY PROTECTION.  
THE SPECIFIC RESPIRATOR SELECTED MUST BE BASED ON CONTAMINATION LEVELS FOUND IN THE WORK PLACE, MUST BE BASED ON THE SPECIFIC OPERATION, MUST NOT EXCEED THE WORKING LIMITS OF THE RESPIRATOR AND MUST BE JOINTLY APPROVED BY THE NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY AND HEALTH AND THE MINE SAFETY AND HEALTH ADMINISTRATION (NIOSH-MSHA).

ANY CHEMICAL CARTRIDGE RESPIRATOR WITH FULL FACEPIECE.

ANY TYPE "C" SUPPLIED-AIR RESPIRATOR WITH A FULL FACEPIECE OPERATED IN

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PRESSURE-DEMAND OR OTHER POSITIVE PRESSURE MODE OR WITH A FULL FACEPIECE,  
HELMET OR HOOD OPERATED IN CONTINUOUS-FLOW MODE.

ANY SELF-CONTAINED BREATHING APPARATUS WITH A FULL FACEPIECE OPERATED IN  
PRESSURE-DEMAND OR OTHER POSITIVE PRESSURE MODE.

FOR FIREFIGHTING AND OTHER IMMEDIATELY DANGEROUS TO LIFE OR HEALTH CONDITIONS:

ANY SELF-CONTAINED BREATHING APPARATUS THAT HAS A FULL FACEPIECE AND IS  
OPERATED IN A PRESSURE-DEMAND OR OTHER POSITIVE-PRESSURE MODE.

ANY SUPPLIED-AIR RESPIRATOR THAT HAS A FULL FACEPIECE AND IS OPERATED IN A  
PRESSURE-DEMAND OR OTHER POSITIVE-PRESSURE MODE IN COMBINATION WITH AN  
AUXILIARY SELF-CONTAINED BREATHING APPARATUS OPERATED IN PRESSURE-DEMAND  
OR OTHER POSITIVE-PRESSURE MODE.

**CLOTHING:**

EMPLOYEE MUST WEAR APPROPRIATE PROTECTIVE (IMPERVIOUS) CLOTHING AND EQUIPMENT  
TO PREVENT REPEATED OR PROLONGED SKIN CONTACT WITH THIS SUBSTANCE.

**GLOVES:**

EMPLOYEE MUST WEAR APPROPRIATE PROTECTIVE GLOVES TO PREVENT CONTACT WITH THIS  
SUBSTANCE.

**EYE PROTECTION:**

EMPLOYEE MUST WEAR SPLASH-PROOF OR DUST-RESISTANT SAFETY GOGGLES TO PREVENT  
EYE CONTACT WITH THIS SUBSTANCE.

EMERGENCY EYE WASH: WHERE THERE IS ANY POSSIBILITY THAT AN EMPLOYEE'S EYES  
BE EXPOSED TO THIS SUBSTANCE, THE EMPLOYER SHOULD PROVIDE AN EYE WASH  
FOUNTAIN WITHIN THE IMMEDIATE WORK AREA FOR EMERGENCY USE.

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AUTHORIZED BY: BAXTER HEALTHCARE CORPORATION  
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