MATERIAL SAFETY DATA SHEET

Martin Resources, Inc.
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DATE PREPARED: 04/19/99
PRODUCT: 21-0-0 Ammonium Sulfate, Feed Grade
CHEM TREC: 1-800-424-9300
NFPA: HEALTH 0, FLAMMABILITY 0, REACTIVITY 0.

SECTION I -- PRODUCT INFORMATION

COMMON CHEMICAL NAME: Ammonium Sulfate, 21-0-0 / 24-S
Ammonium Sulfate
CAS # 7783-20-2

SECTION II -- INGREDIENTS

PEL/TLV NOT ESTABLISHED

SECTION III -- PHYSICAL PROPERTIES

COLOR: White
FORM/APPEARANCE: Crystalline Solid
ODOR: N/A
SPECIFIC GRAVITY: Bulk Density = approx. 65 lbs./Cf.
SOLUBILITY IN WATER: Ammonium Sulfate, soluble
DECOMPOSITION TEMP.: 235°C

SECTION IV -- FIRE AND EXPLOSION DATA

FLASHPOINT: N/A
FIRE FIGHTING PROCEDURE: Water, Foam or CO₂ Extinguishing Media
UNUSUAL HAZARDS: Ammonia fumes may be emitted; Oxides of Nitrogen may form in the presence of a catalyst (Platinum).

SECTION V -- HEALTH EFFECTS

Routes of entry for solids and liquids include eye and skin contact, ingestion and inhalation.
Routes of entry for gases include inhalation and eye contact.
Skin may be a route of entry for liquified gases.

ACUTE OVEREXPOSURE EFFECTS:
Ammonium sulfate is moderately irritating to the eyes and mildly irritating to the skin.
If ingested, ammonium sulfate may cause gastric upset, ulceration or hemorrhage of the G.I. tract, and diarrhea. Systemic ammonia poisoning is possible if sufficient absorption occurs.
CHRONIC OVEREXPOSURE EFFECTS:
There are no known chronic effects associated with this material.

FIRST AID PROCEDURES:
SKIN: Wash with water, remove and launder clothing before reuse.
If irritation occurs, seek medical advice.
EYES: Rinse with water for 15 minutes. If irritation occurs, seek medical advice.
INGESTION: Dilute with water, induce vomiting. Never give fluids or induce vomiting
if the victim is unconscious or having convulsions. Seek medical attention.
INHALATION: Move to fresh air. Aid in breathing, if necessary, and seek medical advice.

SECTION VI -- REACTIVITY DATA

STABILITY: Stable
INCOMPATABILITY: Strong oxidizers, bases, chlorates, nitrates.
CONDITIONS TO AVOID: Temp. > 230°C will cause decomposition and release ammonia.
CORROSIVE PROPERTIES: pH 20% solution = 5.20
OXIDIZER PROPERTIES: Not an oxidizer.

SECTION VII -- PERSONAL PROTECTION

CLOTHING: Gloves, coveralls, apron, and boots as necessary to prevent contact.
EYES: Safety glasses or goggles.
RESPIRATION: NIOSH/MSHA approved dust mask as necessary.
VENTILATION: Use local exhaust to control as needed.
OTHER PERSONAL PROTECTION DATA: Eyewash fountains and showers accessible.

SECTION VIII -- SPILL/LEAK ENVIRONMENTAL

GENERAL: Contain and reclaim if possible.

SECTION IX -- STORAGE AND HANDLING

Keep in a cool, dry place away from any strong bases, chlorates, or nitrates.

SECTION X -- REGULATORY INFORMATION

RCRA Haz. Waste #: N/A
CERCLA: NO
NFPA Rating: Health 0; Flammability 0; Reactivity 0; Other N/A

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Such data is offered solely for consideration, investigation, and verification.

END OF DATA SHEET