

# MATERIAL SAFETY DATA SHEET

Prepared By H. J. Baker & Bro. Inc.

Although the information herein is believed to be true and accurate, we EXPRESSLY DISCLAIM any liability whatsoever for its use and such information is made WITHOUT WARRANTY, EXPRESS OR IMPLIED, OF ANY KIND WHATSOEVER.

SECTION I

EMERGENCY TELEPHONE NO. CHEMTREC (800) 424-9300

|                            |  |                              |  |
|----------------------------|--|------------------------------|--|
| CHEMICAL NAME AND SYNONYMS |  | AMMONIUM SULFATE             |  |
| TRADE NAME AND SYNONYMS    |  | AMMONIUM SULFATE 21-0-0      |  |
| CHEMICAL FAMILY            |  | SALT                         |  |
| CHEMICAL FORMULA           |  | $(\text{NH}_4)_2\text{SO}_4$ |  |
| HAZARD CLASS               |  | NON-HAZARDOUS                |  |
| IDENTIFICATION NO.         |  | NONE                         |  |
| PLACARD/LABEL REQUIRED     |  | NONE                         |  |

SECTION II — TYPICAL ANALYSIS

TYPICAL ANALYSIS

|                    |                   |
|--------------------|-------------------|
| NITROGEN (AMMONIC) | 21.0 Wt %         |
| COMBINED SULFUR    | 24.0 Wt %         |
| COATING AGENT      | 200.0 ppm or less |
| FREE SULFURIC ACID | 0.05 Wt %         |

SECTION III — PHYSICAL DATA

|                         |                    |                                         |      |
|-------------------------|--------------------|-----------------------------------------|------|
| BOILING POINT (°F)      | NA                 | SPECIFIC GRAVITY (H <sub>2</sub> O = 1) | 1.77 |
| VAPOR PRESSURE (mm Hg)  | NA                 | PERCENT VOLATILE BY VOLUME (%)          | NA   |
| VAPOR DENSITY (AIR = 1) | NA                 | EVAPORATION RATE                        | NA   |
| SOLUBILITY IN WATER     | (cold) 1 gm to 1.3 |                                         |      |
| APPEARANCE AND ODOR     |                    |                                         |      |

White to brownish gray, odorless crystals or granules

SECTION IV — FIRE AND EXPLOSION HAZARD DATA

|                                                           |  |                                          |  |
|-----------------------------------------------------------|--|------------------------------------------|--|
| FLASH POINT (Method used)                                 |  | Non-flammable                            |  |
| EXTINGUISHING MEDIA                                       |  | Use suitable agent for surrounding fire. |  |
| SPECIAL FIRE FIGHTING PROCEDURES                          |  |                                          |  |
| Approach upwind from fire. Evacuate people downwind.      |  |                                          |  |
| Wear self-contained breathing apparatus in enclosed area. |  |                                          |  |
| UNUSUAL FIRE AND EXPLOSION HAZARDS                        |  |                                          |  |
| Releases ammonia and sulfur oxides when decomposing.      |  |                                          |  |

|                                                                                                                                                           |                                                           |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|
| SECTION V — HEALTH HAZARD DATA                                                                                                                            |                                                           |
| THRESHOLD LIMIT VALUE                                                                                                                                     | As nuisance dust 10 Mg/M <sup>3</sup> PEL CAL/OSHA 8/9/80 |
| EFFECTS OF OVEREXPOSURE                                                                                                                                   |                                                           |
| Prolonged contact may be mildly to moderately irritating to skin, eyes and respiratory mucous membranes.                                                  |                                                           |
| EMERGENCY AND FIRST AID PROCEDURES                                                                                                                        |                                                           |
| Wash skin with soap and water, eyes with water for 15 minutes or until irritation subsides. If ingested, give large amounts of water - consult physician. |                                                           |

|                                              |          |                |                                                   |
|----------------------------------------------|----------|----------------|---------------------------------------------------|
| SECTION VI — REACTIVITY DATA                 |          |                |                                                   |
| STABILITY                                    | UNSTABLE |                | CONDITIONS TO AVOID<br>Temperatures above 464° F. |
|                                              | STABLE   | X              |                                                   |
| INCOMPATIBILITY (Materials to avoid)         |          |                |                                                   |
| Strong oxidizers, chlorine and hypochlorites |          |                |                                                   |
| HAZARDOUS DECOMPOSITION PRODUCTS             |          |                |                                                   |
| HAZARDOUS                                    |          | MAY OCCUR      | CONDITIONS TO AVOID                               |
| POLYMERIZATION                               |          | WILL NOT OCCUR |                                                   |

|                                                                                                                                                                                                        |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| SECTION VII — SPILL OR LEAK PROCEDURES                                                                                                                                                                 |  |
| STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED                                                                                                                                              |  |
| Contain and pick up spilled material as soon as possible to minimize environmental contamination.                                                                                                      |  |
| WASTE DISPOSAL METHOD                                                                                                                                                                                  |  |
| Sweep up and maximize recovery. Flush residue with water in accordance with applicable federal, state and local regulations. Since material is a fertilizer, it may cause eutrophication of waterways. |  |

|                                               |               |                                     |       |
|-----------------------------------------------|---------------|-------------------------------------|-------|
| SECTION VIII — SPECIAL PROTECTION INFORMATION |               |                                     |       |
| RESPIRATORY PROTECTION (Specify type)         |               |                                     |       |
| Approved respirator for dusty conditions      |               |                                     |       |
| VENTILATION                                   | LOCAL EXHAUST | SPECIAL                             | other |
| PROTECTIVE GLOVES                             |               | EYE PROTECTION                      |       |
|                                               |               | Safety glasses or goggles, if dusty |       |
| OTHER PROTECTIVE EQUIPMENT                    |               |                                     |       |

|                                                                 |  |
|-----------------------------------------------------------------|--|
| SECTION IX — SPECIAL PRECAUTIONS                                |  |
| PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING                 |  |
| Store in cool, dry place                                        |  |
| OTHER PRECAUTIONS                                               |  |
| Highly corrosive to zinc-clad, copper and copper-bearing alloys |  |