

MATERIAL SAFETY DATA SHEET

Winfield Solutions, LLC
P.O. Box 64589 St. Paul, MN 55164-0589

PRODUCT NAME(S)**CRIMSON™**

For Medical Emergency Call: 877-424-7452 or
CHEMTREC (24 hours): 800-424-9300
(Spill, leak, fire, exposure, or accident)

Effective Date: 08/24/2009

I. IDENTIFICATION**CHEMICAL NAME OF PRIMARY COMPONENT:** Ammonium sulfate**FORMULA:** H₈N₂O₄S**MOLECULAR WEIGHT:** 132**SYNONYM:** None**CAS # & NAME:** 7783-20-2, ammonium sulfate**EPA Reg No.:** None**II. INGREDIENTS / SUMMARY OF HAZARDS**

INGREDIENT(S)	CAS NUMBER	WHMIS HAZARD (H) NON-HAZARD (NH)	PERCENT
Ammonium Sulfate	7783-20-2	NH	32 – 36%
Water Conditioning Agents & Formulation Aids	N/A (mixture)	NH	18 - 20%

RATING	NFPA ^{1/}	HMIS ^{2/}
HEALTH HAZARD	1	1
FLAMMABILITY	0	0
REACTIVITY	0	0

1/ National Fire Protection Association Rating

2/ Hazardous Materials Identification System

(4 = Extreme/Severe 3 = High/Serious 2 = Moderate 1 = Slight 0 = Minimum)

SARA TITLE III HAZARD CLASSIFICATION

IMMEDIATE (ACUTE) HEALTH	Yes
DELAYED (CHRONIC) HEALTH	No
FIRE	No
SUDDEN RELEASE OF PRESSURE	No
REACTIVE	No

III. PHYSICAL DATA

SPECIFIC GRAVITY: 1.253
BOILING POINT: Not determined
FREEZING POINT: Not determined
VAPOUR PRESSURE: Not determined
SOLUBILITY IN WATER: Soluble
APPEARANCE: Green liquid
ODOUR: Slightly sweet odor

IV. FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: >100° C
FLAMMABLE LIMITS IN AIR: Not applicable
AUTOIGNITION TEMPERATURE: Not applicable
EXTINGUISHING MEDIA: Use carbon dioxide or dry chemical for small fires and water fog or foam for large fires. This product will produce foam when mixed with water.
SPECIAL FIRE FIGHTING PROCEDURES: Fire fighters should use self contained breathing apparatus and full turnout gear. Prevent runoff of fire water. Avoid exposure to smoke.
UNUSUAL FIRE AND EXPLOSION HAZARDS: Thermal degradation yields ammonia and sulfur trioxide.

V. REACTIVITY DATA

STABILITY: Stable at temperatures above 4.5°C. Do not allow product to freeze.
CONDITIONS TO AVOID: Temperatures below 4.5°C
MATERIALS TO AVOID: Strong oxidizers, bases, chlorates, nitrates
HAZARDOUS DECOMPOSITION PRODUCTS: Ammonia, sulfur trioxide
HAZARDOUS POLYMERIZATION: Will not occur.

VI. HEALTH HAZARD DATA / FIRST AID PROCEDURES

TOXICOLOGY DATA:
Acute Oral LD₅₀(rat): Not determined
Acute Dermal LD₅₀(rabbit): Not determined
Acute Inhalation: Not determined
Eye Irritation (rabbit): Not determined
Dermal Irritation (rabbit): Not determined
Dermal Sensitization: Not determined

EXPOSURE LIMITS:

CHEMICAL NAME(S)	ACGIH (TLV)	OSHA (TWA)
Ammonium sulfate	Not established	Not established

CARCINOGENICITY, TERATOGENICITY, MUTAGENICITY: Not listed as a carcinogen by NRC, IARC or OSHA.

SIGNS OF POISONING: Gastric distress, ulceration, diarrhea

PRIMARY ROUTES OF ENTRY: Ingestion

EFFECTS OF SINGLE OVEREXPOSURE:

Swallowing: If swallowed, gastric upset, ulceration or hemorrhage of the G.I tract and diarrhea can occur. Systemic ammonia poisoning is possible if sufficient absorption occurs.

Skin Absorption: Moderately irritating to the skin.

Inhalation: Ammonium sulfate can irritate the membrane of the respiratory tract if inhaled.

Eyes: Moderately irritating to the eyes.

EFFECTS OF REPEATED OVEREXPOSURE: Prolonged or repeated overexposure may cause skin and/or eye irritation.

OTHER EFFECTS OF OVEREXPOSURE: None known

EXISTING MEDICAL CONDITIONS POSSIBLY AGGRAVATED BY EXPOSURE: Skin contact may aggravate preexisting skin conditions. Inhalation of mists may aggravate preexisting respiratory conditions.

EMERGENCY AND FIRST AID PROCEDURES:

- Swallowing:** If swallowed, do not induce vomiting. Call a physician or poison control center.
PRECAUTION: To prevent the aspiration of swallowed product, lay patient on side with the head lower than the waist.
- Skin:** Wash affected area with plenty of soap and water. Remove contaminated clothing. Launder contaminated clothing before reuse.
- Inhalation:** Remove victim to fresh air. If not breathing, administer artificial respiration. GET MEDICAL ATTENTION.
- Eyes:** Hold eyelids open and flush with a steady stream of water for at least 15 minutes. GET MEDICAL ATTENTION.

NOTE TO PHYSICIAN: Treat symptomatically

VII. PRECAUTIONS FOR SAFE HANDLING AND USE

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:

Dike the area using absorbent or materials such as sand or clay. Recover and contain as much product as possible using absorbent. Clean spill area using a solution of water and detergent. Collect and contain wash water and all contaminated absorbent for disposal. Prevent the spilled product or washings from reaching public sewers or waterways. Wear appropriate protective equipment during the cleanup. Ensure that tools and equipment are adequately decontaminated.

WASTE DISPOSAL METHOD: Dispose of in accordance with federal, provincial and local regulations.

CONTAINER DISPOSAL: Dispose of in an approved facility according to federal, provincial and local regulations.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: Store in a cool, dry, secure area.

VIII. EXPOSURE CONTROLS / PERSONAL PROTECTION

PROTECTIVE EQUIPMENT SHOULD BE USED DURING THE FOLLOWING PROCEDURES:

- Manufacture or formulation of this product.
- Repair and maintenance of contaminated equipment.
- Cleanup of leaks and spills.

RESPIRATORY PROTECTION: If misting conditions exist, use NIOSH / MSHA approved respirator for organic vapors.

VENTILATION: Local exhaust

PROTECTIVE CLOTHING: Chemical resistant gloves, coveralls, and shoes plus socks

EYE PROTECTION: Safety goggles

USER SAFETY RECOMMENDATIONS: Safety showers and eye wash should be easily accessible.

IX. REGULATORY STATUS

TDG INFORMATION: Not regulated

SARA TITLE III

Section 302-304 (40 CFR 350):

Extremely Hazardous Substance (EHS): Not applicable

Section 312, Reporting (40 CFR 370):

SARA/OSHA Hazardous Chemical Reporting Quantity: Not Applicable

Section 313, Toxic Chemicals: Not listed

Reportable Quantity (RQ): Not listed

RCRA HAZARDOUS WASTE: Not listed

International Right-To-Know Regulations: NA

X. REFERENCES

THE INFORMATION HEREIN IS GIVEN IN GOOD FAITH,
BUT NO WARRANTY, EXPRESS OR IMPLIED, IS MADE.

Revision (8-24-09): Updated company information from Agriliance, LLC to Winfield Solutions, LLC and updated P.O. Box. Replaces document dated 06/24/2005.