VAN DIEST SUPPLY COMPANY
Distributor and Manufacturer of Agricultural Chemicals

Safety Data Sheet

1. IDENTIFICATION

1.1 GHS Product Identifier: **Cornbelt® Premium AMS**

1.2 Alternate Name(s): Ammonium sulfate, AMS

1.3 Chemical Class: Nitrogen based fertilizer

1.4 Active Ingredient: Ammonium sulfate

1.5 Recommended Use/Restrictions: Please see the label for specific recommendations regarding this product.

1.6 Supplier's Details:
Van Diest Supply Company
1434 220th St.
Post Office Box 610
Webster City, Iowa 50595

1.7 Emergency Phone Number: FOR CHEMICAL EMERGENCY, SPILL, LEAK, FIRE, EXPOSURE, OR ACCIDENT CALL CHEMTREC - DAY OR NIGHT 1-800-424-9300

2. HAZARDS IDENTIFICATION

2.1 Health Hazards:

Class	Category
Serious eye damage/eye irritation	2A
Acute toxicity (oral)	4

2.2 GHS Label Elements and Precautionary Statements:

Warning

Hazards:
H302 Harmful if swallowed.
H319 Causes serious eye irritation.

Precautionary Statements:
P264 Wash hands and forearms thoroughly after handling.
P270 Do not eat, drink, or smoke when using this product.
P280 Wear eye protection, face protection, protective clothing, and protective gloves.
P301 + P312 If swallowed, call a doctor if you feel unwell.
P305 + P351 + P338 If in eyes, rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
P330 If swallowed, rinse mouth.
P337 + P313 If eye irritation persists, get medical advice/attention.
P501 Dispose of contents/container according to local, regional, national, territorial, provincial, and international regulations.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Material	Common Name/ Synonyms	CAS #	% in Formulation
Ammonium sulfate	AMS	7783-20-2	99.5% to 100%

This safety data sheet is not a guarantee of product specification. Specific ingredient content may be found on the product label.

4. FIRST AID MEASURES

4.1 General First Aid Recommen-dations are as follows:	**Eye Contact:**	Hold eye open and rinse slowly and gently with clean water. Remove contact lenses after 5 minutes, if present, then continue rinsing eye for 15 more minutes. Seek medical advice as appropriate.
	Skin Contact:	Remove contaminated clothing and clean skin thoroughly with soap and water. Wash contaminated clothing before reuse.
	Ingestion:	Rinse mouth immediately and then drink plenty of water. Seek medical attention. Do not induce vomiting unless told to do so by a poison control center, physician, or hospital. Do not give anything by mouth to an unconscious person.
	Inhalation:	After inhalation of dust, seek fresh air. If difficulties occur, seek medical attention. After inhalation of decomposition products, keep patient calm, remove to fresh air, and seek medical attention. **Note to Physician:** After inhalation of decomposition products: pulmonary edema prophylaxis.

5. FIREFIGHTING MEASURES

5.1 Suitable Extinguishing Media:	Carbon dioxide, water spray
5.2 Specific Hazards Arising from the Chemical:	Ammonia can be emitted at 455°F
5.3 Special Protective Equipment and Precautions for Firefighters:	Use full protective clothing and a self-contained breathing apparatus. Evacuate nonessential personnel from area to prevent exposure to fire, smoke, fumes, or products of combustion. After inhalation of decomposition products, a risk of pulmonary edema exists. Symptoms can appear later. Dike and collect water runoff.
5.4 Impact Sensitivity:	Based on the chemical structure, there is no shock-sensitivity.
5.5 Further information:	Product itself is non-combustible; fire extinguishing method of surrounding areas must be considered. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions, Protective Equipment, and Emergency Procedures:	Do not get in eyes, on skin, or on clothing. Using appropriate personal protective equipment specified in Section 8 – Exposure Control/Personal Protection, sweep up spilled material and place in a container for disposal. Do not discharge into drains/surface waters/groundwater. Retain and dispose of contaminated wash water. Disposal methods should be consistent with information in Section 13 – Disposal Considerations.
6.2 Methods and Material for Containment and Cleanup:	Using safe handling precautions established elsewhere in this safety data sheet, attempt to control the spill at its source if safe to do so. For large amounts, sweep/shovel up. For residues, sweep/shovel up. Rinse away with water. Control the release of material to prevent contamination of soil or bodies of water. Collect in a suitable container for disposal.

7. HANDLING AND STORAGE

7.1 Precautions for Safe Handling:	Follow personal protective equipment recommendations as shown in Section 8 – Exposure Control/Personal Protection when handling this material, adjusted for specific handling methods and conditions, to prevent contact with this material. Wash thoroughly with soap and water after handling this material. Do not allow eating, drinking, tobacco use, or cosmetic application in areas where there is a potential for exposure to this material. Follow label instructions carefully.
7.2 Conditions for Safe Storage	Store this product in a well-ventilated area in the original container. Segregate from nitrites, alkalis, and alkalizing substances. Secure material from access by children or domestic animals. Do not store this product near food, beverages, or tobacco products. Do not store with incompatible materials. Refer to Section 10 – Stability and Reactivity, for incompatible materials.
7.3 General Advice:	Protect against moisture. The substance/product may cake under the influence of moisture.

8. EXPOSURE CONTROL/PERSONAL PROTECTION

8.1 Occupational Exposure Limits:

Material	CAS #	OSHA PEL	ACGIH TLV	Carcinogen		
				NTP	IARC	OSHA
Ammonium sulfate	7783-20-2	NE	NE	No	No	No

8.2 Engineering Controls:

Maintain air concentrations below occupational exposure standards using ventilation techniques as necessary.

8.3 Personal Protective Equipment: The following recommendations are suitable for small, incidental contact with this material. Recommendations for commercial or on-farm application of this chemical may be found on the container label.

Eye Contact:	If splashing can be reasonably anticipated, for instance while pouring the product into another container, wear chemical splash goggles.
Skin Contact:	Wear chemical resistant protective gloves. Consult with glove manufacturer for testing data. Choose body protection depending on activity and possible exposure, e.g. head protection, apron, protective boots, and/or chemical protection suit. At the end of exposure the skin should be cleaned and skin-care agents applied.
Ingestion:	Do not allow eating, drinking, tobacco use, or cosmetic application in areas where there is a potential for exposure to this material.
Inhalation:	Observe OSHA regulations for respirator use (29 CFR 1910.134). Wear a NIOSH-certified (or equivalent) respirator as necessary.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	White crystals	**Upper/Lower Explosive Limit:**	NA
Odor:	Odorless	**Vapor Pressure:**	0.0000001 hPa
Odor Threshold:	NA	**Vapor Density:**	1.766 g/cm^3
pH:	5 (100 g/L @ 68°F)	**Relative Density:**	1.77
Melting Point:	662° F	**Solubility:**	764 g/L @ 68°F
Boiling Point:	Decomposes before boiling	**Partition Coefficient (*n*-Octanol/Water):**	ND
Flash Point:	NA	**Auto-Ignition Temperature:**	NA
Evaporation Rate:	NA	**Decomposition Temperature:**	455°F
Flammability:	Not flammable	**Viscosity:**	NA

ND=No Data; NA=Not Applicable

10. STABILITY AND REACTIVITY

10.1 Reactivity: Evolution of ammonia under influence of alkalis. Reacts with alkalis and nitrites.

10.2 Chemical Stability: Stable under normal conditions. Not an oxidizer.

10.3 Possibility of Hazardous Reactions: Evolution of ammonia under influence of alkalis. Reacts with alkalis and nitrites.

10.4 Conditions to Avoid: To avoid thermal decomposition, do not overheat. Avoid contact with alkaline reactive substances and nitrites.

10.5 Incompatible Materials: Alkaline reactive substances and nitrites.

10.6 Hazardous Decomposition Products: Ammonia

11. TOXICOLOGICAL INFORMATION

11.1 Likely Routes of Exposure: Ingestion and dermal.

11.2 Skin Corrosion/Irritation: This material is non-irritating to the skin.

11.3 Serious Eye Damage/Irritation: This material is non-irritating to the eyes.

11.4 Respiratory or Skin Sensitization: This material has not been tested, but is not suspected of being a sensitizer.

11.5 Germ Cell Mutagenicity: This material is not suspected of being mutagenic.

11.6 Carcinogenicity: This material is not suspected of being a carcinogen.

11.7 Reproductive Toxicity: This material is not suspected of being a teratogen.

11.8 STOT-Single Exposure: Overexposure is unlikely under normal handling conditions.

11.9 STOT-Long Term Exposure: This material is not linked to long-term exposure effects.

11.10 Aspiration Hazard: This product does not meet the definition of an aspiration hazard.

11.11 Acute Toxicology:

Ingestion:	Oral LD_{50}	>4,250 mg/kg
Skin Contact:	Dermal LD_{50}	>2,000 mg/kg
Inhalation:	Inhalation LC_{50} (dust/mist)	NA

12. ECOLOGICAL INFORMATION

12.1 Aquatic Invertebrates: *Daphnia* test, acute, static: *Ceriodaphnia* sp., EC_{50} (48 h): 121.7 mg/L
Chronic Semi-static: 70 d, 3.12 mg/L

12.2 Aquatic Plants: Toxicity to aquatic plants: Other green algae; EC_{50} (18 d): 2,700 mg/L
The details of the toxic effect relate to the nominal concentration.

12.3 Microorganisms: Activated sludge; EC_{20} (0.5 h): approximately 1,050 mg/L
The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

12.4 Persistence and Degradability: No data.

12.5 Bioaccumulative Potential: Study scientifically not justified.

12.6 Mobility in Soil: Study scientifically not justified.

13. DISPOSAL CONSIDERATIONS

Dispose of in accordance with national, state, and local regulations.

14. TRANSPORT INFORMATION

14.1 DOT Classification: Not classified as a dangerous good under transport regulations.

14.2 IMDG Sea Transport: Not classified as a dangerous good under transport regulations.

14.3 IATA/ICAO Air Transport: Not classified as a dangerous good under transport regulations.

15. REGULATORY INFORMATION

15.1 EPCRA 311/312 Hazard Classes: Not hazardous

15.2 CERCLA/SARA 302 Reportable Quantity: Not hazardous

15.3 TSCA Inventory: Released/Listed

15.4 MA, NJ, PA State RTK: 7783-20-2 (Ammonium sulfate)

16. OTHER INFORMATION

SDS Version: 6/22/2016

NFPA Hazard Codes: Health: 1 Fire: 0 Reactivity: 0 Special: N/A

The information and recommendations contained in this safety data sheet are understood to be correct by Van Diest Supply Company. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. Information in this SDS follows different criteria from, and serves a different purpose than the product labeling.