

NFPA HAZARD RATING				U.S. TRANSPORT SUMMARY	
0	Least				
1	Slight	2	Health		Not regulated by the U.S. DOT as a hazardous material. See Section 14 for additional information.
2	Moderate	0	Flammability		
3	High	0	Reactivity		
4	Severe				

SECTION 1: IDENTIFICATION	
Product Name:	N-Pak® AMS Liquid
EPA Registration #:	Exempt
Product ID/Unity #:	10000769, 10013129, 10014706, 10014708, 10016596, 10124405
Common Name:	Water conditioner
Chemical Description:	Ammonium sulfate
Recommended Uses:	Adjuvant – See product label for full directions for use.
Restrictions for Use:	See product label for any potential use restrictions.
Manufactured For: WINFIELD SOLUTIONS, LLC P. O. Box 64589 St. Paul, MN 55164-0589	MEDICAL EMERGENCY TELEPHONE NUMBER: 1-877-424-7452 (24hrs) Non-Emergency Business Inquiries: 1-855-494-6343 Mon – Fri 8am – 5pm (Central Standard Time)
FOR EMERGENCY, SPILL, LEAK, FIRE, EXPOSURE, OR ACCIDENT, CALL: CHEMTREC 1-800-424-9300 (24 hours)	

SECTION 2: HAZARDS IDENTIFICATION	
EMERGENCY OVERVIEW: Clear liquid with slight ammonia odor. Based on currently available data, this product does not meet the regulatory definition of a hazardous chemical. However, good industrial hygiene practices should be used in handling the product.	
POTENTIAL HEALTH EFFECTS: Eyes: May cause mild but reversible eye irritation. Skin: May cause mild but reversible skin irritation. Inhalation: May cause minor irritation of the upper respiratory tract. Ingestion: May cause minor irritation of the digestive tract. Preexisting Conditions: None known Chronic Health Effects: None known	
Carcinogenicity	NTP: Not listed IARC: Not listed OSHA: Not listed
OSHA HCS 2012 CLASSIFICATION: This product does not meet the definition of a hazardous chemical under OSHA's Hazard Communication Standard.	
SIGNAL WORD: CAUTION	
HAZARD STATEMENTS: None required.	
Percent of product with unknown toxicity: 0%	
PRECAUTIONARY STATEMENTS: Prevention: See Section 8 for personal protective equipment. Response: See Section 4 for first aid information. Storage: See Section 7 for storage information. Disposal See Section 13 for disposal information.	

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS		
Ingredient	% (wt)	CAS Reg. #
Ammonium sulfate	33.0 – 35.0%	7783-20-2
*Ingredients not specifically listed are non-hazardous and are considered to be confidential business information under 29 CFR 1910.1200(j).		
See Section 8 for exposure limits.		

SECTION 4: FIRST AID MEASURES	
Inhalation:	Remove person from contaminated area to fresh air and assist breathing as needed. Seek medical attention if irritation occurs.
Ingestion:	Seek medical attention or call a poison control center for treatment advice. Do not induce vomiting unless instructed to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.
Eyes:	Flush eyes with clean water for at least 15 minutes. Lift eyelids to facilitate irrigation. If present, remove contact lenses after 5 minutes and continue rinsing. Seek medical attention if eye irritation persists.
Skin:	Remove contaminated clothing and wash before re-using. Flush skin with water and then wash with soap and water. Seek medical attention if skin irritation persists.

SECTION 5: FIRE FIGHTING MEASURES	
Suitable Extinguishing Media:	Foam, Dry chemical, Carbon dioxide, Water spray or fog
Unsuitable Extinguishing Media:	Water jet. Use a water jet only to cool heated containers.
Special Fire Fighting Procedures:	Wear NIOSH/MSHA approved self-contained breathing apparatus and full bunker gear. Dike area to prevent runoff and contamination of water sources. Dispose of fire control water later. Avoid breathing vapors; keep upwind.
Hazardous Combustion Products:	Ammonia, sulfur trioxide and asphyxiates such as carbon monoxide may result from combustion.
Unusual Fire and Explosion Hazards:	None known

SECTION 6: ACCIDENTAL RELEASE MEASURES	
Personal Precautions:	Refer to Section 8 for personal protective equipment to be worn during containment and clean-up of a spill involving this product.
Environmental Precautions:	Keep spilled product from entering sewers or waterways.
Methods for Containment:	Contain spilled product by diking area with sand or earth.
Methods for Clean-up:	Cover contained spill with an inert absorbent material such as sand, vermiculite or other appropriate material. Vacuum, scoop, or sweep up material and place in a container for disposal. Do not place spilled material back in original container.
Other Information:	None known

SECTION 7: HANDLING AND STORAGE	
Handling:	Ensure adequate ventilation during handling and use. Immediately clean up spills that occur during handling. Keep containers closed when not in use. Practice good hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics.
Storage:	Store in cool, dry areas away from children, food and feed products in an area away from incompatible substances. Protect packaging from physical damage. Protect from exposure to fire. Maintain product above minimum storage temperature.
Minimum Storage Temperature:	32°F
Other Precautions:	Consult Federal, state and local laws and regulations pertaining to storage.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION			
Exposure Guidelines			
Component:	OSHA PEL	ACGIH TLV	NIOSH REL
No components have established limits			
Respiratory Protection: For most conditions, no respiratory protection should be needed. If used in a poorly ventilated area, use a NIOSH approved air-purifying respirator with cartridges/canisters approved for general particulates.			
Engineering Controls: Local Exhaust: Provide general or local exhaust ventilation systems to maintain airborne concentrations below OSHA PELs or other specified exposure limits. Local exhaust ventilation is preferred.			
Protective Gloves: While not expected to cause skin irritation, the use of chemically protective gloves is recommended to prevent against skin contact.			
Eye Protection: While not expected to cause eye irritation, the use of chemical safety goggles is recommended to prevent against eye contact. Contact lenses are not protective eye devices.			
Other Protective Clothing or Equipment: Wear long-sleeve shirt, long pants and shoes plus socks to prevent skin contact.			
Work/Hygienic Practices: Never eat, drink, nor use tobacco in work areas. Practice good hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics.			

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES			
Physical State:	Liquid	Specific Gravity (H₂O=1):	1.20 (typical)
Vapor Pressure (mm Hg):	Not determined	Density (lbs/gallon):	10.01 lbs/gallon (typical)
Vapor Density (Air=1):	Not determined	Melting Point/Freezing Point:	Not determined
Solubility in Water (wt %):	Not determined	Boiling Point/Range:	Not determined
Viscosity (centistokes):	Not determined	pH:	Not determined
Appearance and odor:	Clear to hazy liquid with mild odor	Flash Point:	>200°F (93°C)

SECTION 10: STABILITY AND REACTIVITY	
Reactivity: None known	
Chemical Stability: Product is stable at ambient temperature and pressure, under normal storage and handling conditions.	
Possibility of Hazardous Reactions: Will not occur	
Conditions to Avoid: Contact with incompatible materials.	
Incompatible Materials: Strong oxidizers, bases, chlorates, nitrates	
Hazardous Decomposition Products: Ammonia, sulfur trioxide and asphyxiates such as carbon monoxide may result from combustion.	

SECTION 11: TOXICOLOGICAL INFORMATION	
ACUTE TOXICITY	
Eye Effects:	May cause mild but temporary eye irritation.
Skin Effects:	May cause mild but temporary skin irritation. Estimated LD50 >5,000 mg/kg
Acute Inhalation Effects:	Not determined
Acute Oral Effects:	Estimated LD50 >5,000 mg/kg
Specific Target Organ Toxicity:	None known
CHRONIC TOXICITY	
Chronic Effects:	None known
Carcinogenicity:	None known
Mutagenicity:	None known
Teratogenicity:	None known
Reproductive Toxicity:	None known

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POTENTIAL HEALTH EFFECTS:

Eyes: May cause mild but reversible eye irritation.
Skin: May cause mild but reversible skin irritation.
Inhalation: May cause minor irritation of the upper respiratory tract.
Ingestion: May cause minor irritation of the digestive tract.

SECTION 12: ECOLOGICAL INFORMATION

ENVIRONMENTAL SUMMARY: Not determined

ECOTOXICITY DATA:

Fish Acute and Prolonged Toxicity: Not determined
Aquatic Invertebrate Acute Toxicity: Not determined
Aquatic Plant Toxicity: Not determined
Bird Acute and Prolonged Toxicity: Not determined
Honeybee Toxicity: Not determined

ENVIRONMENTAL EFFECTS:

Soil Absorption/Mobility: Not determined
Persistence and degradability: Not determined
Bioaccumulative Potential: Not determined
Other adverse effects: Not determined

SECTION 13: DISPOSAL CONSIDERATIONS

Waste: Dispose of in accordance with applicable Federal, state and local laws and regulations.
Container: Triple rinse and recycle the container or dispose of in accordance with Federal, state and local laws and regulations.
RCRA Characteristics: It is the responsibility of the individual disposing of this product to determine the RCRA classification and hazard status of the waste.

SECTION 14: TRANSPORT INFORMATION

DOT: This product is not regulated by the U.S. Department of Transportation as a hazardous material for ground shipment.
(Ground)
IMDG: This product is not regulated by the IMDG code as a hazardous material for shipment by sea.
(Sea)
IATA: This product is not regulated by the IATA as a hazardous material for air shipment.
(Air)
TDG: This product is not regulated by the TDG as a hazardous material for ground shipment.
(Canada)

SECTION 15: REGULATORY INFORMATION

TSCA Inventory: All components are listed on the TSCA inventory.
SARA Title III Information:
Section 302 - Extremely hazardous substances: None listed
Section 311/312 - Hazard Categories: None
Section 313 - The following chemicals are subject to the reporting requirements of Section 313 of Title III, Superfund Amendments and Reauthorization Act of 1986 and 40 CFR 372:
 None listed
CERCLA - This product contains the following chemicals which have a reportable quantity (RQ) under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA):
 None listed
California Proposition 65: This product does not contain any chemicals known to the state of California to cause cancer and/or reproductive harm.

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N-Pak[®] AMS Liquid

U.S. State Worker and Community Right-To-Know (RTK) Information (CT, IL, MA, MN, NH, NJ, PA, RI):

Chemical Name	CAS #	State(s)
Ammonium sulfate	7783-20-2	MA, NJ, PA, RI

Canadian Domestic Substances List: All components are listed on the DSL.

WHMIS Classification: This product is not approved for use in Canada. WHMIS classification is not determined.

SECTION 16: OTHER

Disclaimer: The information presented herein is based on available data from reliable sources and is correct to the best of WinField Solutions' knowledge. WinField Solutions, LLC makes no warranty, express nor implied, regarding the accuracy of the data or the results obtained from the use of this product. Nothing herein may be construed as recommending any practice or any product in violation of any law or regulations. The user is solely responsible for determining the suitability of any material or product for a specific purpose and for adopting any appropriate safety precautions. We disclaim all liability for injury or damage stemming from any improper use of the material or product described herein.

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Sections Revised: All