



# MATERIAL SAFETY DATA SHEET

## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: WSU Ammonium Sulfate - Dry

Chemical Name: Ammonium Sulfate

Synonyms: None

MSDS Number: DAS006

Last Update: 2/22/2006

### COMPANY INFORMATION

Water Solutions Unlimited, Inc.  
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## 2. COMPOSITION/INFORMATION ON INGREDIENTS

Specific chemical identity of ingredients withheld as proprietary information. Refer to remaining sections for information concerning the properties and effects of ingredients.

## 3. HAZARDS IDENTIFICATION

### EMERGENCY OVERVIEW

Appearance and Odor: Tan powder, with no distinct odor.

### POTENTIAL HEALTH EFFECTS

INGESTION: Small doses may cause mild discomfort. Used as a general purpose food additive and potable water additive.

INHALATION: Slight discomfort possible. Causes readily reversible changes which disappear after end of exposure. Dust may cause further aggravation to those predisposed to respiratory problems.

EYE CONTACT: Slight eye abrasion possible.

SKIN CONTACT: Slight abrasion possible.

SKIN ABSORPTION: Prolonged contact may cause slight skin abrasion.

EFFECTS OF OVERDOSE: One reference lists that massive doses ingested or large doses administered under the skin, or in the blood stream, may cause diarrhea, and there arises the possibility of sufficient absorption to produce diuresis and systemic

ammonia poisoning. Another reference lists unknown—no information on humans considered valid by authors.

#### **4. FIRST AID MEASURES**

IF IN EYES OR ON SKIN, wash exposed areas with water. Flush eyes with running water for 15 minutes. Immediate first aid is not likely to be required, but seek medical attention if condition persists. Wash skin with mild soap and water. Seek medical condition if condition persists.

IF INHALED, immediate first aid is not likely to be required. Should cause no problems by inhalation. However, if symptoms occur, remove to fresh air. Remove material from eyes, skin and clothing.

IF SWALLOWED in large amount, give 2-3 glasses of water and induce vomiting. Call a doctor.

#### **5. FIRE FIGHTING MEASURES**

EXTINGUISHING MEDIA: Used in a solution as a fire retardant and to fight fires. Use media suitable to extinguish source of fire.

SPECIAL FIRE FIGHTING PROCEDURES: Use media suitable to extinguish source of fire.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Releases NH<sub>3</sub> and Sulfur Oxides when decomposing. If accidentally mixed with oxidizers it will sensitize these materials and make them more reactive under fire conditions.

FLASH POINT (Test Method): Non-flammable Flammable Limits LOWER UPPER

#### **6. ACCIDENTAL RELEASE**

ENVIRONMENTAL PRECAUTIONS: Keep out of waterways and all bodies of water. Do not contaminate any body of water by direct application, cleaning of equipment or disposal. Since WSU Ammonium Sulfate is a fertilizer, it may promote algae growth in waterways.

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Contain spill. Sweep up and scoop dry material into suitable container for use or recycle. Mop up and absorb liquid and dispose of into suitable container for use or recycle. May be used as a fertilizer using good agronomic practices.

#### **7. HANDLING AND STORAGE**

HANDLING: HANDLE IN ACCORDANCE WITH GOOD INDUSTRIAL HYGIENE AND SAFETY PRACTICES. THESE PRACTICES INCLUDE AVOIDING UNNECESSARY EXPOSURE AND REMOVAL OF MATERIAL FROM EYES, SKIN, AND CLOTHING. Avoid prolonged contact with skin. Use dust mask if material is dry and dusty.

STORAGE: Store in a cool, dry place to maintain product performance. SEPARATE FROM STRONG OXIDIZERS SUCH AS CHLORATES, NITRATES AND NITRITES.

#### **8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

EYE PROTECTION: Where there is potential for eye contact, wear goggles with side shield and have eye flushing equipment immediately available.

SKIN PROTECTION: Wear appropriate protective clothing and chemical resistant gloves to prevent skin contact.

RESPIRATORY PROTECTION: Use dust mask if material is in dry form and dusty.

VENTILATION: Provide adequate ventilation for bulk storage.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

Chemical Formula: Proprietary  
Appearance: Tan powder  
Odor: no distinct odor  
Max Use Level: 25 mg/L

NOTE: These physical data are typical values based on material tested but may vary from sample to sample. Typical values should not be construed as a guaranteed analysis of any specific lot or as specifications for the product.

**10. STABILITY AND REACTIVITY**

STABILITY (Normal Conditions): Stable

CONDITIONS TO AVOID: None

MATERIALS TO AVOID: Oxidizers

HAZARDOUS DECOMPOSITION PRODUCTS: Releases NH<sub>3</sub> and Sulfur Oxide fumes when decomposing.

HAZARDOUS POLYMERIZATION: will not occur

**11. TOXICOLOGICAL INFORMATION**

Acute Oral Toxicity: LD50 (rat) is 640-4250 mg/kg; not acutely toxic by oral exposure. (TFI Product Testing Results, OECD Guideline 425)

Acute Dermal Toxicity: LD50 (rat) is greater than 2000 mg/kg (ppm); not acutely toxic by dermal exposure. (TFI Product Testing Results, OECD Guideline 402)

Acute Aquatic Toxicity: Fish 96 hour LC50 is greater than 13.6-159.8 mg total NH<sub>3</sub>/L; daphnia 96 hour LC50: greater than 27 mg total NH<sub>3</sub>/L.

**12. ECOLOGICAL INFORMATION**

None listed.

**13. DISPOSAL CONSIDERATIONS**

Use or recycle. As the product is a fertilizer, use as fertilizer following good agronomic practices or consult local authorities.

**14. TRANSPORT INFORMATION**

Please apply the appropriate regulations to properly classify your shipment for transportation.

Shipping name: Not regulated by D.O.T.

Hazard Class: None	C.A.S. Number: 7783-20-2
Reportable Quantity: None	D.O.T. Number: None
Labels Required: None	Haz Waste No: None
Placard: None	EPA Regist No: None

**15. REGULATORY INFORMATION**

Carcinogenicity: by IARC?: Yes ( ) No (X) by NTP?: Yes ( ) No (X) by OSHA?: Yes ( ) No (X)

Not on the 302 list of SARA reportable quantities.

**16. OTHER INFORMATION**

This material is certified to ANSI/NSF Standard 60 by NSF® International for use in potable water systems.

Revised MSDS supersedes previous MSDS.

Product Use: potable water treatment

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