



# American Plant Food Corporation

903 MAYO SHELL ROAD GALENA PARK TEXAS 77547 P.O. BOX 584  
PHONE NUMBER 800-634-2861

## SAFETY DATA SHEET

### Ammonium Sulfate 21-0-0 24S

**Granular; Coarse; Standard; NRich; S-Sul; Solugreen; NPAC; MPAC; N-Sul-Ate**

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Revision date: 2/17/2016

Version: 3.0

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## SECTION 1: Identification

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### 1.1 Product Identifier:

Ammonium Sulfate 21-0-0/24 S

### 1.2 Other means of identification:

Granular; Coarse; Standard; NRich; S-Sul; Solugreen; NPAC; MPAC; N-Sul-Ate

### 1.3 Recommended use of the chemical and restriction on use

Recommended use \*fertilizers; herbicide adjuvant; fermenting processes; fire extinguishing compounds; tanning hides and water treatment.

\*The "Recommended use" identified for this product is provided solely to comply with a US Federal requirement and is not part of the seller's published specification. The terms of this Safety Data Sheet (SDS) do not create or infer any warranty, express or implied, including by incorporation into or reference in the seller's sales agreement.

### 1.4 Supplier's details:

Company:

American Plant Food Corporation  
903 Mayo Shell Road  
P.O. Box 584  
Galena Park, TX 77547  
1-800-634-2861

### 1.5 Emergency Phone Number:

CHEMTREC: 1-800-424-9300  
American Plant Food Corporation: 1-800-634-286

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## SECTION 2: Hazards Identification

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**\*According to Regulation 2012 OSHA Hazard Communication Standard: 29 CFR Part 1910.1200**

### 2.1 Classification or the substance or mixture:

(GHS – US)

Eye Irritant 2B H320

Specific Target Organ Toxicity 4 H335

Acute Toxicity Dermal 5 H313

Acute Toxicity Oral 5 H303

### 2.2 Labeling elements:


GHS-US labeling

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Hazard pictograms (GHS-US) :	
	GHS07
Signal word (GHS-US) :	Warning
Hazard statements (GHS-US) :	H303 – May be harmful if swallowed in large quantities H313 – May be harmful in contact with skin H320 - Causes eye irritation H335 - May cause respiratory irritation
Precautionary statements (GHS-US) :	P261 - Avoid breathing dust/fume/gas/mist/vapors/spray P264 - Wash hands and forearms thoroughly after handling P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing P312 - Call a poison center/doctor/... if you feel unwell P337+P313 - If eye irritation persists: Get medical advice/attention P403+P233 - Store in a well-ventilated place. Keep container tightly closed P501 - Dispose of contents/container to ... specify in accordance with local/regional/national regulations

### 2.3 Other hazards

No specific dangers known, if the regulations/notes for storage and handling are considered.

### Labeling of special preparations (GHS):

The following percentage of the mixture consists of component(s) with unknown hazards regarding the acute toxicity: 99-100% inhalation: dust.

## SECTION 3: Composition/Information on ingredients

### 3.1 Substance

<u>CAS Number</u>	<u>Content (W/W)</u>	<u>Chemical name</u>
7783-20-2	>99.5%	Ammonium sulfate

### 3.2 Mixture

# SAFETY DATA SHEET

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Not applicable

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### SECTION 4: First-aid measures

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#### 4.1 Description of necessary first aid measures

First aid measures general advice:	Remove contaminated clothing.
First aid measures after inhalation:	After inhalation of dust. Fresh air. If difficulties occur: Seek medical attention. After inhalation of decomposition products: Keep patient calm, remove to fresh air, seek medical attention.
First aid measures after skin contact:	Wash thoroughly with soap and water.
First aid measures after eye contact:	Wash affected eyes for at least 15 minutes under running water with eyelids held open. Seek medical attention.
First aid measures after ingestion:	Rinse mouth immediately and then drink plenty of water, seek medical attention.

#### 4.2 Most important symptoms and effects, both acute and delayed

Not expected to present a significant hazard under anticipated conditions of normal use.

#### 4.3 Indication of any immediate medical attention and specific treatment needed

Note to physician: Treatment: After inhalation of decomposition products: Pulmonary edema prophylaxis.

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### SECTION 5: Firefighting measures

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#### 5.1 Extinguishing media

Suitable media: Carbon dioxide, water spray, foam, dry powder, sand

#### 5.2 Specific hazards arising from the chemical

ammonia, can be emitted at 235 °C

#### 5.3 Advice for firefighters

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.

Protection during firefighting:	Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.
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### SECTION 6: Accidental release measures

# SAFETY DATA SHEET

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---

### 6.1 Personal precautions, protective equipment and emergency procedures

Non-emergency personnel:	Do not get in eyes, on skin, or on clothing. Take appropriate protective measures (use PPE suggested in section 8).
Emergency responders:	Do not get in eyes, on skin, or on clothing. Take appropriate protective measures (use PPE suggested in section 8).

### 6.2 Environmental precautions

Do not discharge into drains/surface waters/groundwater. Retain and dispose of contaminated wash water.

### 6.3 Methods and material for containment and cleaning up

For large amounts:	Sweep/shovel up.
For residues:	Sweep/shovel up. Rinse away with water.

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## SECTION 7: Handling and storage

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### 7.1 Precautions for safe handling

Precautions for safe handling:	Keep away from sources of ignition – no smoking. Handle in accordance with good industrial hygiene and safety practice. Avoid all sources of ignition: heat, sparks, open flame.
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### 7.2 Conditions for safe storage, including any incompatibilities

General advice:	Protect against moisture. The substance/product may cake under the influence of moisture.
Storage incompatibility:	General advice: Segregate from alkalis and alkalinizing substances. Segregate from nitrites and alkaline substances.

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## SECTION 8: Exposure controls/personal protection

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### 8.1 Control parameters

No specific information available

### 8.2 Exposure controls

Respiratory protection:	Observe OSHA regulations for respirator use (29 CFR 1910.134). Wear a NIOSH-certified (or equivalent) respirator as necessary.
Hand protection:	Wear chemical resistant protective gloves., eg. Nitrile

# SAFETY DATA SHEET

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	rubber (0.4 mm), chloroprene rubber (0.5 mm); polyvinylchloride (0.7 mm), and other, Consult with glove manufacturer for testing data.
Eye protection:	Safety glasses with side-shields. Tightly fitting safety goggles (chemical goggles).
Body protection:	Body protection must be chosen depending on activity and possible exposure, e.g. head protection, apron, protective boots, chemical-protection suit.
General safety and hygiene measures:	At the end of the shift the skin should be cleaned and skin-care agents applied.
Other information:	Do not eat, drink, or smoke during use.

## SECTION 9: Physical and chemical properties

### 9.1 Information of basic chemical and physical properties

Form	Solid/crystalline	
Color	White to Yellowish Tint	
Odor	Odorless	
Odor threshold		No data available
pH	Approximately 5.1	(100 g/l, 20°C)
Melting point (decomposition)	Approx. 305°C	The substance / product decomposes
Onset of boiling		(other) The substance / product decomposes therefore not determined.
Sublimation point		No applicable information available.
Flashpoint		(other) The substance / product is non-combustible.
Flammability	Not flammable	(other)
Flammability of Aerosol Products		Not applicable, the product does not form flammable aerosols
Vapor pressure	0.0000001 hPa	(25°C) (measured) Literature data.
Density	1.766 g/cm <sup>3</sup>	(20°C)
Relative density	1.77	(25°C, 1,013 hPa) (other) Literature data)
Bulk density	1,000 kg/m <sup>3</sup>	(20°C)
Vapor density		Not applicable, the product is a

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		non-volatile solid.
Partitioning coefficient n-octanol/water (low Pow)		Not applicable.
Self-ignition temperature		Not self igniting.
Thermal decomposition	> 25°C	To avoid thermal decomposition, do not overheat.
Viscosity dynamic		Not applicable, this product is a solid.
Viscosity kinematic		Not applicable, this product is a solid.
Particle size diameter	Coarse/S-Sul/Solugreen N-Sul-Ate: Granular/N-Rich MPAC: NPAC: Standard	> 0.9-1.3 mm > 0.9-1.3 mm > 2 mm > 1.5 mm > 3.5 mm < 0.9 mm
Maximum Solubility in water	764 g/l 843 g/l	(20°C) (50°C)
Evaporation rate		Not applicable, the product is a non-volatile solid.

### SECTION 10: Stability and Reactivity

#### 10.1 Reactivity

No hazardous reactions if stored and handles as prescribed/indicated.

#### 10.2 Chemical stability

The product is stable if stored and handles as prescribed/indicated.

#### 10.3 Possibility of hazardous reactions

Evolution of ammonia under influence of alkalies. Reacts with alkalis and nitrites.

#### 10.4 Conditions to avoid

Protect from atmospheric humidity.

#### 10.5 Incompatible materials

Alkaline reactive substances, nitrites

# SAFETY DATA SHEET

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### 10.6 Hazardous decomposition products

Ammonia

## SECTION 11: Toxicological Information

### 11.1 Information on toxicological effects

#### Primary routes of exposure

Routes of entry for solids and liquids are ingestion and inhalation, but may include eye or skin contact. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.

#### Acute Toxicity/Effects

a) Acute toxicity

Assessment of acute toxicity: Of low toxicity after single ingestion. Of low toxicity after short-term skin contact.

LD50 oral rat	4,250 mg/kg (BASF Test)
LD50 dermal rat	> 2,000 mg/kg (Literature data)
Ammonium sulfate (7783-20-2)	

b) Irritation / corrosion

Assessment of irritating effects: May be irritating to the skin. Dust is irritating to the eyes.

c) Serious eye damage / irritation

Can cause eye irritation.

d) Respiratory or skin Sensitization

Assessment of sensitization: Skin sensitizing effects were not observed in animal studies.

e) Germ cell mutagenicity

Assessment of mutagenicity: The substance was not mutagenic in bacteria. The substance was not mutagenic in mammalian cell culture. The substance was not mutagenic in studies with mammals.

f) Carcinogenicity

Assessment of carcinogenicity: In long-term animal studies in which the substance was given in high concentrations by feed, a carcinogenic effect was not observed.

g) Reproductive toxicity

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Assessment of reproduction toxicity: The results of animal studies gave no indication of a fertility impairing effect. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

h) STOT single exposure  
 May cause respiratory irritation.

i) STOT repeated exposure  
 Not classified. Based on available data, the classification criteria are not met.

j) Aspiration Hazard  
 Not classified

**SECTION 12: Ecological Information**

**12.1 Toxicity**

Fish	LC50 (Oncorhynchus mykiss) (96 h) 53 mg/l (fish test acute)
Aquatic invertebrates	EC50 (Ceriodaphnia sp.) (48 h) 121.7 mg/l (Daphnia test acute, static)
Aquatic plants	EC50 Chlorella vulgaris (18 d) 2,770 mg/l (growth rate). The details of the toxic effect relate to the nominal concentration.
Chronic Toxicity	EC10 (70 d) 3.12 mg/l (semistatic)
Soil living organisms	LC50 (14 d) 201 mg/kg, Eisena foetida (artificial soil). *This product has not been tested. The statement has been derived from substances/products of a similar structure of composition.
Other terrestrial non-mammals	Study not justified.
Toxicity to microorganisms	OECD Guideline 209 aquatic EC20 (0.5 h) (activated sludge); approx. 1,050 mg/l *This product has not been tested. The statement has been derived from substances/products of a similar structure of composition.

**12.2 Persistence and degradation**

Assessment biodegradation and elimination (H <sub>2</sub> O)	Inorganic product which cannot be eliminated from water by biological purification processes. Can be oxidized to nitrate, or be reduced to nitrogen by microorganisms.
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**12.3 Bioaccumulative potential**



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Assessment bioaccumulation potential	Accumulation in organisms is not to be expected.
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### 12.4 Mobility in soil

Assessment transport between environmental compartments	Adsorption to solid soil phase is expected from ammonium. Sulfate soil adsorption will not occur.
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## SECTION 13: Disposal considerations

### Waste disposal of substance

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

### Container disposal

Contaminated packaging should be emptied as far as possible; then it can be passed on for recycling after being thoroughly cleaned.

## SECTION 14: Transport Information

### Land transport

USDOT: Not classified as a dangerous good under transport regulations

### Sea transport

IMDG: Not classified as a dangerous good under transport regulations

### Air transport

IATA/ICAO: Not classified as a dangerous good under transportation regulation

## SECTION 15: Regulatory Information

### Federal Regulations

#### Registration status:

Chemical TSCA, US released / listed

OSHA hazard category: No data available.

EPCRA 311/312 (Hazard categories): Not hazardous;

### State regulations

State RTK CAS Number Chemical name

MA, NJ, PA 7783-20-2 Ammonium sulphate

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### SECTION 16: Other Information

Recommended use: fertilizers Chemical Intermediate process chemical Fire extinguishing compounds Laboratory chemicals

NFPA Hazard codes:

Health : 1    Fire: 0    Reactivity: 0    Special:

HMIS III rating

Health: 1    Flammability: 0    Physical hazard: 0

NFPA and HMIS use a numbering scale ranging from 0 to 4 to indicate the degree of hazard. A value of zero means that the substance possesses essentially no hazard; a rating of four indicates extreme danger. Although similar, the two rating systems are intended for different purposes, and use different criteria. The NFPA system was developed to provide an on-the-spot alert to the hazards of a material, and their severity, to emergency responders. The HMIS system was designed to communicate workplace hazard information to employees who handle hazardous chemicals. We support worldwide Responsible Care® initiatives. We value the health and safety of our employees, customers, suppliers and neighbors, and the protection of the environment. Our commitment to Responsible Care is integral to conducting our business and operating our facilities in a safe and environmentally responsible fashion, supporting our customers and suppliers in ensuring the safe and environmentally sound handling of our products, and minimizing the impact of our operations on society and the environment during production, storage, transport, use and disposal of our products.

SDS Prepared by:

APF Technical Staff

SDS Prepared on: 2/17/16

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