

Issue Date: 11/25/2015 Revision Date: N/a Version: 1

# 1. Identification of the Substance/Preparation and of the Company/Undertaking

**Product Identifier** 

Product Name: Ammonium Sulfate 21-0-0

Other means of identification

**EPA Pesticide Registration Number:** 

Recommended use of the chemical and restrictions on use

Recommended use: Granular Fertilizer

Details of the supplier of the safety data sheet

**Company** 

Regal Chemical Company 600 Branch Dr., Alpharetta, GA 30004

**Emergency telephone number** 

**Company Telephone:** (770) 475-4837

Emergency Telephone: Chemtrec 1-800-262-8200

## 2. Hazardous Identification

Classification: Irritant Skin irritation, category 2 Eye irritation, category 2A

Acute toxicity (oral, dermal, inhalation), category 3

Eye irrit. cat 2 Skin Sens, cat 2 STOT SE 3 AcTox Oral 4

Hazards Not Otherwise Classified - Combustible Dust

Signal Word (OSHA): Warning

Hazard Statements:
Harmful if swallowed
Causes skin irritation
Causes serious eye irritation
May cause respiratory irritation

**Hazard Symbols**:





Issue Date: 11/25/2015 Revision Date: N/a Version: 1

#### **Precautionary Statements:**

Wash ... thoroughly after handling

Do not eat, drink or smoke when using this product Avoid breathing dust/fume/gas/mist/vapors/spray

Use only outdoors or in a well-ventilated area

Wear protective gloves/protective clothing/eye protection/face protection

Specific treatment (see supplemental first aid instructions on this label)

Rinse mouth

Take off contaminated clothing and wash before reuse

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

IF ON SKIN: Wash with soap and water

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

If skin irritation occurs: Get medical advice/attention If eye irritation persists get medical advice/attention

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to

do.

Continue rinsing

Store locked up

Store in a well ventilated place. Keep container tightly closed

Dispose of contents/container to...

### **Combustible Dust Hazard:**

May form combustible dust concentrations in air (during processing).

# 3. Composition/Information on Ingredients

CAS Number	<u>Ingredients</u>	Percentages by weight
CAS 7783-20-2	Ammonium Sulfate, ACS	>95%

## 4. First Aid Measures

## First aid measures:

**Ingestion**: Rinse mouth thoroughly. Do not induce vomiting. Have exposed individual drink sips of water. Seek medical attention if irritation, discomfort or vomiting persists.

**Eye Contact**: Protect unexposed eye. Rinse/flush exposed eye(s) gently using water for 15-20 minutes. Remove contact lens(es) if able to do so during rinsing. Seek medical attention if irritation persists or if Concerned.

**Skin Contact:** Wash affected area with soap and water. Rinse/flush exposed skin gently using water for 15-20 minutes. Seek medical advice if discomfort or irritation persists.

**Inhalation**: Move exposed individual to fresh air. Loosen clothing as necessary and position individual in a comfortable position. Seek medical advice if discomfort or irritation persists. If breathing difficult, give oxygen.



Issue Date: 11/25/2015 Revision Date: N/a Version: 1

### Most Important systems and effects, both acute and delayed:

Irritation, Nausea, Headache, Shortness of breath.

#### Indication of any immediate medical attention and special treatment needed:

If seeking medical attention, provide SDS document to physician.

### 5. Fire-Fighting Measures

<u>Suitable extinguishing media:</u> If in laboratory setting, follow laboratory fire suppression procedures. Use appropriate fire suppression agents for adjacent combustible materials or sources of ignition.

<u>Special hazards arising from the substance or mixture:</u> Combustion products may include carbon oxides or other toxic vapors. Thermal decomposition can lead to release of irritating gases and vapors. Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

<u>Special protective equipment and precautions for firefighters:</u> Use NIOSH-approved respiratory protection/breathing apparatus. Move product containers away from fire or keep cool with water spray as a protective measure, where feasible. Use spark-proof tools and explosion-proof equipment.

# 6. Accidental Release Measures

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

Wear protective equipment. Transfer to a disposal or recovery container. Use spark-proof tools and explosion-proof equipment. Use respiratory protective device against the effects of fumes/dust/aerosol. Keep unprotected persons away. Ensure adequate ventilation. Keep away from ignition sources. Protect from heat. Stop the spill, if possible. Contain spilled material by diking or using inert absorbent.

#### **Environmental precautions:**

Prevent from reaching drains, sewer or waterway. Collect contaminated soil for characterization per Section 13.

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

If in a laboratory setting, follow Chemical Hygiene Plan procedures. Place into properly labeled containers for recovery or disposal. If necessary, use trained response staff/contractor. Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Collect solids in powder form using vacuum with (HEPA filter).

## 7. Handling and Storage

#### Precautions for safe handling:

Minimize dust generation and accumulation. Wash hands after handling. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Routine housekeeping should be instituted to



Issue Date: 11/25/2015 Revision Date: N/a Version: 1

ensure that dusts do not accumulate on surfaces. Dry powders can build static electricity charges when subjected to the friction of transfer and mixing operations. Follow good hygiene procedures when handling chemical materials. Do not eat, drink, smoke, or use personal products when handling chemical substances. If in a laboratory setting, follow Chemical Hygiene Plan. Use only in well ventilated areas. Avoid generation of dust or fine particulate. Avoid contact with eyes, skin, and clothing.

#### Conditions for safe storage, including any incompatibilities:

Store in a cool location. Provide ventilation for containers. Avoid storage near extreme heat, ignition sources or open flame. Store away from foodstuffs. Store away from oxidizing agents. Store in cool, dry conditions in well-sealed containers. Keep container tightly sealed. Store with like hazards.

# 8. Exposure Controls/Personal Protection

Control Parameters: OSHA PEL TWA (Total Dust) 15 mg/m3 (50 mppcf\*)

ACGIH TLV TWA (inhalable particles) 10 mg/m3

#### **Appropriate engineering controls:**

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use/handling. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor or dusts (total/respirable) below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above. Use under a fume hood. It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in handling of this product contain explosion relief vents or an explosion suppression system or an oxygen deficient environment. Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment).

**Skin Protection**: The glove material has to be impermeable and resistant to the product/the substance/ the preparation being used/handled. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

**Eye Protection**: Safety glasses with side shields or goggles.

**Respiratory Protection**: Not required under normal conditions of use. Use suitable respiratory protective device when high concentrations are present. Use suitable respiratory protective device when aerosol or mist is formed. For spills, respiratory protection may be advisable.

**General**: The usual precautionary measures are to be adhered to when handling chemicals. Keep away from food, beverages and feed sources. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Do not inhale gases/fumes/dust/mist/vapor/aerosols. Avoid contact with the eyes and skin.

## 9. Physical and Chemical Properties

Information on basic physical and chemical properties



Issue Date: 11/25/2015 Revision Date: N/a Version: 1

**Appearance:** Colorless Solid

**Odor:** Odorless

Odor Threshold: Not determined

<u>Property</u> <u>Values</u>

**pH:** 5-6 (5% aq. Sol.)

Melting point / Freezing Point 280°C

Boiling Point / Boiling Range
Flash Point (Test Method)
Flammability (solid, gas)
Flammability Limits (% in air)
Not determined
Not determined
Not determined
Not determined

Vapor Density Not determined Relative Density 1.8

**Solubility(ies)** Material is water soluble

**Partition Coefficient: n-octanol/water** n-octanol/water: log Pow: -5.1

Autoignition Temperature Not determined

**Decomposition Temperature** 350°C

Viscosity Not determined

# 10. Stability and Reactivity

Reactivity: Nonreactive under normal conditions.

Chemical Stability: No decomposition if used and stored according to specifications.

Possibility of Hazardous Reactions: None under normal processing.

Conditions to Avoid: Store away from oxidizing agents, strong acids or bases. Incompatible materials.

Excess heat. Dust generation.

**Incompatible Materials**: Strong acids. Strong bases. Strong oxidizing agents.

Hazardous Decomposition Products: Sulfur dioxide. Nitrogen. Ammonia. Ammonium bisulfate.

# 11. Toxicological Information

Acute Toxicity:				
Oral:	2840mg/kg	APS: LD50 orl-rat		
Chronic Toxicity: No additional information.				
Corrosion Irritation: No additional information.				
Sensitization:		No additional information.		
Single Target Organ (STOT):		No additional information.		
Numerical Measures:		No additional information.		
Carcinogenicity:		No additional information.		
Mutagenicity:		No additional information.		
Reproductive Toxicity:		No additional information.		



Issue Date: 11/25/2015 Revision Date: N/a Version: 1

# 12. Ecological Information

Ecotoxicity Persistence and Degradability: Readily degradable in the environment.

Persistence and degradability

**Bioaccumulation** 

Other adverse effects

## 13. Disposal Considerations

### Waste disposal recommendations:

Product/containers must not be disposed together with household garbage. Do not allow product to reach sewage system or open water. It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities (US 40CFR262.11). Consult federal state/ provincial and local regulations regarding the proper disposal of waste material that may incorporate some amount of this product.

# 14. Transport Information

**UN-Number** 

**Not Dangerous Goods** 

**UN proper shipping name** 

**Not Dangerous Goods** 

Transport hazard class(es)

Packing group: Not Dangerous Goods

Environmental hazard: Transport in bulk:

Special precautions for user

## 15. Regulatory Information

**United States (USA)** 

SARA Section 311/312 (Specific toxic chemical listings):

None of the ingredients is listed

SARA Section 313 (Specific toxic chemical listings):

7783-20-2 Ammonium Sulfate

RCRA (hazardous waste code):

None of the ingredients is listed

**TSCA (Toxic Substances Control Act):** 

All ingredients are listed.

CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act):

None of the ingredients is listed



Issue Date: 11/25/2015 Revision Date: N/a Version: 1

#### **Proposition 65 (California):**

Chemicals known to cause cancer:

None of the ingredients is listed

Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed

Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed

Chemicals known to cause developmental toxicity:

None of the ingredients is listed

#### Canada

**Canadian Domestic Substances List (DSL):** 

All ingredients are listed.

Canadian NPRI Ingredient Disclosure list (limit 0.1%):

None of the ingredients is listed

Canadian NPRI Ingredient Disclosure list (limit 1%):

None of the ingredients is listed

### 16. Other Information

NFPA:		HIVIIS	
Health Hazards	1	Health hazards	1
Flammability	0	Flammability	0
Instability	0	Physical hazards	0
Physical and Chemical Properties	0	Personal protection	Χ

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