

# **SAFETY DATA SHEET**

Creation Date 11-Sep-2009 Revision Date 22-May-2017 Revision Number 2

1. Identification

Product Name Ammonium sulfate

Cat No.: A701-3; A701-50; A702-3; A702-10; A702-500; A938-500; BP212-212;

BP212R-1; S71915ACS; NC9685224

Synonyms Diammonium sulfate; Sulfuric acid, diammonium salt (Granular/Crystalline/Certified

ACS/Laboratory/Primary Standard)

**Recommended Use** Laboratory chemicals.

Uses advised against Not for food, drug, pesticide or biocidal product use

Details of the supplier of the safety data sheet

Company

Fisher Scientific One Reagent Lane Fair Lawn, NJ 07410 Tel: (201) 796-7100

**Emergency Telephone Number** 

CHEMTREC®, Inside the USA: 800-424-9300 CHEMTREC®, Outside the USA: 001-703-527-3887

## 2. Hazard(s) identification

### Classification

Classification under 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Based on available data, the classification criteria are not met

#### Label Elements

None required

### Hazards not otherwise classified (HNOC)

None identified

# 3. Composition / information on ingredients

| Component        | CAS-No    | Weight % |  |
|------------------|-----------|----------|--|
| Ammonium sulfate | 7783-20-2 | >95      |  |

### 4. First-aid measures

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Ammonium sulfate

Obtain medical attention.

**Skin Contact** Wash off immediately with plenty of water for at least 15 minutes. Get medical attention

immediately if symptoms occur.

**Inhalation** Move to fresh air. If breathing is difficult, give oxygen. Get medical attention immediately if

symptoms occur.

**Ingestion** Do not induce vomiting. Obtain medical attention.

Most important symptoms/effects
Notes to Physician

No information available.
Treat symptomatically

### 5. Fire-fighting measures

Unsuitable Extinguishing Media No information available

Flash Point No information available Method - No information available

**Autoignition Temperature** 

**Explosion Limits** 

Upper No data available
Lower No data available
Sensitivity to Mechanical Impact No information available
Sensitivity to Static Discharge No information available

### **Specific Hazards Arising from the Chemical**

Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes.

#### **Hazardous Combustion Products**

None known

### **Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA

| Health | Flammability | Instability | Physical hazards |
|--------|--------------|-------------|------------------|
| 1      | 0            | 0           | N/A              |

### Accidental release measures

Personal Precautions
Environmental Precautions

Ensure adequate ventilation. Use personal protective equipment. Avoid dust formation. Should not be released into the environment. Do not flush into surface water or sanitary sewer system. See Section 12 for additional ecological information.

**Methods for Containment and Clean** Sweep up or vacuum up spillage and collect in suitable container for disposal. Avoid dust **Up** formation.

|          | 7. Handling and storage  |
|----------|--|
| Handling | Wear personal protective equipment. Ensure adequate ventilation. Avoid contact with skin, eyes and clothing. Avoid ingestion and inhalation. Avoid dust formation. |

**Storage** Keep containers tightly closed in a dry, cool and well-ventilated place.

### 8. Exposure controls / personal protection

Exposure Guidelines

This product does not contain any hazardous materials with occupational exposure

limitsestablished by the region specific regulatory bodies.

**Engineering Measures** None under normal use conditions.

**Personal Protective Equipment** 

**Eye/face Protection** Wear appropriate protective eyeglasses or chemical safety goggles as described by

OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard

EN166.

Skin and body protection Wear appropriate protective gloves and clothing to prevent skin exposure.

**Respiratory Protection** No protective equipment is needed under normal use conditions.

**Hygiene Measures** Handle in accordance with good industrial hygiene and safety practice.

### 9. Physical and chemical properties

**Physical State** Solid **Appearance** Colorless Odorless Odor

No information available **Odor Threshold** 

5-6 (@ 20) 5% aq.sol.(20 C) Ha

Melting Point/Range 280 °C / 536 °F **Boiling Point/Range** No information available Flash Point No information available

**Evaporation Rate** Not applicable

Flammability (solid,gas) No information available

Flammability or explosive limits

No data available Upper No data available Lower No information available **Vapor Pressure** 

**Vapor Density** Not applicable

No information available **Specific Gravity** 

Solubility Soluble in water Partition coefficient; n-octanol/water No data available

**Autoignition Temperature** 

**Decomposition Temperature** 350 °C **Viscosity** Not applicable Molecular Formula H8 N2 O4 S

**Molecular Weight** 132.13

## 10. Stability and reactivity

**Reactive Hazard** None known, based on information available

Stability Stable under normal conditions.

**Conditions to Avoid** Incompatible products. Excess heat. Avoid dust formation.

Strong oxidizing agents **Incompatible Materials** 

Hazardous Decomposition Products None under normal use conditions

**Hazardous Polymerization** Hazardous polymerization does not occur.

**Hazardous Reactions** None under normal processing.

## 11. Toxicological information

#### Ammonium sulfate

#### **Acute Toxicity**

#### **Product Information**

**Component Information** 

| Component        | Component LD50 Oral |            | LC50 Inhalation |  |
|------------------|---------------------|------------|-----------------|--|
| Ammonium sulfate | 2840 mg/kg (Rat)    | Not listed | Not listed      |  |

**Toxicologically Synergistic** 

No information available

**Products** 

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Irritation May cause eye, skin, and respiratory tract irritation

Sensitization No information available

**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

|   | Component        | CAS-No    | IARC       | NTP        | ACGIH      | OSHA       | Mexico     |
|---|------------------|-----------|------------|------------|------------|------------|------------|
| - | Ammonium sulfate | 7783-20-2 | Not listed |

Mutagenic Effects

No information available

**Reproductive Effects** No information available.

**Developmental Effects**No information available.

**Teratogenicity** No information available.

STOT - single exposure None known STOT - repeated exposure None known

Aspiration hazard No information available

Symptoms / effects,both acute and No information available

delayed

**Endocrine Disruptor Information** No information available

Other Adverse Effects See actual entry in RTECS for complete information. The toxicological properties have not

been fully investigated.

## 12. Ecological information

#### **Ecotoxicity**

The product contains following substances which are hazardous for the environment. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

| Component        | Freshwater Algae | Freshwater Fish             | Microtox | Water Flea         |
|------------------|------------------|-----------------------------|----------|--------------------|
| Ammonium sulfate | -                | Cyprinus carpio: LC50: >460 | -        | EC50: 423 mg/L/24h |
|                  |                  | mg/L/96h                    |          | LC50: 14 mg/L/48h  |
|                  |                  | Brachydanio rerio: LC50:    |          | _                  |
|                  |                  | 420 mg/L/96h                |          |                    |

Persistence and Degradability Soluble in water Persistence is unlikely based on information available.

**Bioaccumulation/ Accumulation** No information available.

**Mobility** . Will likely be mobile in the environment due to its water solubility.

| Component        | log Pow |
|------------------|---------|
| Ammonium sulfate | -5.1    |

Waste Disposal Methods Chemical waste generators must determine whether a discarded chemical is classified as a

Ammonium sulfate

hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

# 14. Transport information

DOTNot regulatedTDGNot regulatedIATANot regulatedIMDG/IMONot regulated

## 15. Regulatory information

#### International Inventories

| Component        | TSCA | DSL | NDSL | EINECS    | ELINCS | NLP | PICCS | ENCS | AICS | IECSC | KECL |
|------------------|------|-----|------|-----------|--------|-----|-------|------|------|-------|------|
| Ammonium sulfate | Х    | Х   | -    | 231-984-1 | -      |     | Χ     | Χ    | Χ    | Х     | Х    |

### Legend:

- X Listed
- E Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.
- F Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.
- N Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.
- P Indicates a commenced PMN substance
- R Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.
- S Indicates a substance that is identified in a proposed or final Significant New Use Rule
- T Indicates a substance that is the subject of a Section 4 test rule under TSCA.
- XU Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B).
- Y1 Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.
- Y2 Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.

### U.S. Federal Regulations

**TSCA 12(b)** 

Not applicable

#### **SARA 313**

| Component        | CAS-No    | Weight % | SARA 313 - Threshold<br>Values % |
|------------------|-----------|----------|----------------------------------|
| Ammonium sulfate | 7783-20-2 | >95      | 1.0                              |

### SARA 311/312 Hazard Categories

Acute Health Hazard
Chronic Health Hazard
No
Fire Hazard
No
Sudden Release of Pressure Hazard
No
Reactive Hazard
No

CWA (Clean Water Act) Not applicable

Clean Air Act Not applicable

**OSHA** Occupational Safety and Health Administration

Not applicable

**CERCLA** 

Not applicable

California Proposition 65 This product does not contain any Proposition 65 chemicals

### U.S. State Right-to-Know

Regulations

| Component Massachusetts | New Jersey | Pennsylvania | Illinois | Rhode Island |
|-------------------------|------------|--------------|----------|--------------|
|-------------------------|------------|--------------|----------|--------------|

#### Ammonium sulfate

| Ammonium sulfate | X | - | X | - | X |
|------------------|---|---|---|---|---|

#### **U.S. Department of Transportation**

Reportable Quantity (RQ): N
DOT Marine Pollutant N
DOT Severe Marine Pollutant N

#### **U.S. Department of Homeland Security**

This product does not contain any DHS chemicals.

### Other International Regulations

Mexico - Grade No information available

| 16. Other information |  |
|-----------------------|--|
|-----------------------|--|

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Revision Summary This document has been updated to comply with the US OSHA HazCom 2012 Standard

replacing the current legislation under 29 CFR 1910.1200 to align with the Globally

Harmonized System of Classification and Labeling of Chemicals (GHS).

#### **Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

**End of SDS**