



4 Farmers ... For Farmers

Printing date 23.01.2015

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# SAFETY DATA SHEET

According to Safe Work Australia

Revision: 23.01.2015

## 1 . IDENTIFICATION: PRODUCT IDENTIFIER AND CHEMICAL IDENTITY

**Product Name:** 4FARMERS AMMONIUM SULPHATE

**Recommended Use of the Chemical and Restriction on Use:** Agricultural fertiliser

**Details of Manufacturer or Importer:**

4Farmers Pty Ltd  
70 McDowell Street  
Welshpool WA 6106

**Phone Number:** +61 8 9356 3446

**Emergency telephone number:** National Poison Information Centre: 13 11 26

## 2 . HAZARDS IDENTIFICATION

**Hazardous Nature:**

Classified as Hazardous according to criteria of National Occupational Health & Safety Commission (NOHSC), Australia.

Not classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. (7th edition)



Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2A H319 Causes serious eye irritation.

STOT SE 3 H335 May cause respiratory irritation.

**Signal Word** Warning

**Hazard Statements**

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

**Precautionary Statements**

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P264 Wash hands thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P321 Specific treatment (see on this label).

P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P332+P313 If skin irritation occurs: Get medical advice/attention.

P337+P313 If eye irritation persists: Get medical advice/attention.

P302+P352 IF ON SKIN: Wash with plenty of water.

P312 Call a POISON CENTER/doctor if you feel unwell.

P362+P364 Take off contaminated clothing and wash it before reuse.

P405 Store locked up.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P501 Dispose of contents/container in accordance with local/regional/national regulations.

## 3 . COMPOSITION AND INFORMATION ON INGREDIENTS

**Chemical Characterization: Mixtures**

**Description:** Mixture of substances listed below with nonhazardous additions.

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Hazardous Components:		
7783-20-2	Sulfuric acid, diammonium salt	>99%
	⚠ Skin Irrit. 2, H315; Eye Irrit. 2A, H319; STOT SE 3, H335	

## 4 . FIRST AID MEASURES

### Inhalation:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention if breathing problems develop.

### Skin Contact:

In case of skin contact, immediately remove contaminated clothing and wash affected areas with water and soap. Seek medical attention if symptoms occur.

### Eye Contact:

In case of eye contact, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek immediate medical attention.

### Ingestion:

If swallowed, do not induce vomiting. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. Do not give anything by mouth to an unconscious person. Seek immediate medical attention.

### Information for Doctor:

Establish a patent airway with suction where necessary.

Watch for signs of respiratory insufficiency and assist ventilation as necessary.

Administer oxygen by non-rebreather mask at 10 to 15 L/min.

Monitor and treat, where necessary, for pulmonary oedema and shock.

DO NOT use emetics. Where ingestion is suspected rinse mouth and give up to 200 mL water (5 mL/kg recommended) for dilution where patient is able to swallow, has a strong gag reflex and does not drool.

Consider orotracheal or nasotracheal intubation for airway control in unconscious patient or where respiratory arrest has occurred. Positive-pressure ventilation using a bag-valve mask might be of use.

Drug therapy should be considered for pulmonary oedema.

Hypotension with signs of hypovolaemia requires the cautious administration of fluids. Fluid overload might create complications.

Treat seizures with diazepam.

Proparacaine hydrochloride should be used to assist eye irrigation.

### Symptoms Caused by Exposure:

Inhalation: Symptoms may include coughing and shortness of breath.

Skin Contact: Causes irritation, redness, itching and pain.

Eye Contact: Causes irritation, redness, stinging, tearing, blurred vision and pain.

Ingestion: Ingestion of large amounts may cause ammonia poisoning, vomiting, diarrhea, nausea, digestive tract irritation, spasms, narcotic conditions, respiratory paralysis, fall in blood pressure and central nervous system disorders.

## 5 . FIRE FIGHTING MEASURES

**Suitable Extinguishing Media:** Use fire extinguishing methods suitable to surrounding conditions.

### Specific Hazards Arising from the Chemical:

Non-combustible solid.

Hazardous combustion products include oxides of carbon, nitrogen and sulfur, and hydrogen sulfide.

Ammonium sulphate reacts violently with potassium chlorate; reacts with caustics forming ammonia.

Mixtures with sodium hypochlorite form unstable, explosive nitrogen trichloride.

### Special Protective Equipment and Precautions for Fire Fighters:

Wear Safe Work Australia approved self-contained breathing apparatus and full protective clothing.

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## 6 . ACCIDENTAL RELEASE MEASURES

### **Personal Precautions, Protective Equipment and Emergency Procedures:**

Wear Safe Work Australia approved dust/particulate filter respirator and full protective clothing. Evacuate all non-essential personnel from affected area. Do not breathe dust. Ensure adequate ventilation. Avoid generating dust.

### **Environmental Precautions:**

In the event of a major spill, prevent spillage from entering drains or water courses.

### **Methods and Materials for Containment and Cleaning Up:**

Stop leak if safe to do so and sweep/shovel up spills and place into a suitable container for disposal. Wash contaminated surfaces well with soap and water. Slippery when spilled.

## 7 . HANDLING AND STORAGE

### **Precautions for Safe Handling:**

Use of safe work practices are recommended to avoid eye or skin contact and inhalation of dust. Food, beverages and tobacco products should not be stored or consumed where this material is in use. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use. Provide eyewash fountains and safety showers in close proximity to points of potential exposure.

### **Conditions for Safe Storage:**

Store in a cool, dry and well ventilated area. Keep container tightly closed when not in use. Protect from direct sunlight and moisture. Keep away from sulfuric acid, aliphatic amines, alkanolamines, amides, organic anhydrides, isocyanates, vinyl acetate, alkylene oxides, epichlorohydrin, potassium plus ammonium nitrate, sodium potassium powder plus ammonium nitrate.

## 8 . EXPOSURE CONTROLS AND PERSONAL PROTECTION

### **Exposure Standards:**

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

**Engineering Controls:** Ensure adequate ventilation of the working area.

### **Respiratory Protection:**

Use a Safe Work Australia approved particulate respirator under conditions where exposure to the substance is apparent (e.g. generation of high concentrations of dust, inadequate ventilation, development of respiratory tract irritation) and engineering controls are not feasible. See Australian Standards AS/NZS 1715 and 1716 for more information.

### **Skin Protection:**

PVC, PVA, nitrile, neoprene, rubber or vinyl gloves, cotton overalls buttoned to the neck and wrist and a washable hat. See Australian/New Zealand Standard AS/NZS 2161 and 4501 for more information.

### **Eye and Face Protection:**

Eye and face protectors for protection against dust. See Australian/New Zealand Standard AS/NZS 1337 for more information.

## 9 . PHYSICAL AND CHEMICAL PROPERTIES

### **Appearance:**

<b>Form:</b>	Fine crystals or powder
<b>Colour:</b>	White
<b>Odour:</b>	Slight ammonia odour
<b>Odour Threshold:</b>	No information available

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<b>pH-Value:</b>	5.5 (1% solution)
<b>Melting point/Melting range:</b>	235-280 °C
<b>Initial Boiling Point/Boiling Range:</b>	Not applicable
<b>Flash Point:</b>	Not applicable
<b>Flammability:</b>	Product is not flammable.
<b>Auto-ignition Temperature:</b>	No information available
<b>Decomposition Temperature:</b>	235 °C
<b>Explosion Limits:</b>	
<b>Lower:</b>	Not applicable
<b>Upper:</b>	Not applicable
<b>Vapour Pressure:</b>	No information available
<b>Density:</b>	No information available
<b>Relative Density:</b>	1.77
<b>Vapour Density:</b>	No information available
<b>Evaporation Rate:</b>	Not applicable
<b>Solubility in Water:</b>	Miscible
<b>Partition Coefficient (n-octanol/water):</b>	No information available

## 10 . STABILITY AND REACTIVITY

**Possibility of Hazardous Reactions:** Hazardous polymerisation will not occur.

**Chemical Stability:** Stable at ambient temperature and under normal conditions of use.

**Conditions to Avoid:** Direct sunlight and moisture.

**Incompatible Materials:**

Sulfuric acid, aliphatic amines, alkanolamines, amides, organic anhydrides, isocyanates, vinyl acetate, alkylene oxides, epichlorohydrin, potassium plus ammonium nitrate, sodium potassium powder plus ammonium nitrate.

**Hazardous Decomposition Products:** Oxides of nitrogen and sulphur.

## 11 . TOXICOLOGICAL INFORMATION

**Toxicity:**

**LD<sub>50</sub>/LC<sub>50</sub> Values Relevant for Classification:**

**7783-20-2 Sulfuric acid, diammonium salt**

Oral	LD <sub>50</sub>	2840 mg/kg (rat)
		640 mg/kg (mouse)

**Acute Health Effects**

**Inhalation:**

Dust inhalation can cause irritation to the nose, throat and respiratory tract. Symptoms may include coughing and shortness of breath.

**Skin:** Causes irritation, redness, itching and pain.

**Eye:** Direct contact causes eye irritation, redness, stinging, tearing, blurred vision and pain.

**Ingestion:**

Ingestion of large amounts may cause ammonia poisoning, vomiting, diarrhea, nausea, digestive tract irritation, spasms, narcotic conditions, respiratory paralysis, fall in blood pressure and central nervous system disorders.

**Skin Corrosion / Irritation:** Causes skin irritation.

**Serious Eye Damage / Irritation:** Causes serious eye irritation.

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**Respiratory or Skin Sensitisation:** Based on classification principles, the classification criteria are not met.

**Germ Cell Mutagenicity:** Based on classification principles, the classification criteria are not met.

**Carcinogenicity:** This product does NOT contain any IARC listed chemicals.

**Reproductive Toxicity:** Based on classification principles, the classification criteria are not met.

**Specific Target Organ Toxicity (STOT) - Single Exposure:** May cause respiratory irritation.

**Specific Target Organ Toxicity (STOT) - Repeated Exposure:**  
Based on classification principles, the classification criteria are not met.

**Aspiration Hazard:** Based on classification principles, the classification criteria are not met.

**Chronic Health Effects:** No information available

**Existing Conditions Aggravated by Exposure:** No information available

## 12 . ECOLOGICAL INFORMATION

**Ecotoxicity:** No information available

**Aquatic toxicity:** No information available

**Persistence and Degradability:** No information available

**Bioaccumulative Potential:** No information available

**Mobility in Soil:** No information available

## 13 . DISPOSAL CONSIDERATIONS

**Disposal Methods and Containers:** Dispose according to applicable local and state government regulations.

**Special Precautions for Landfill or Incineration:**

Please consult your state Land Waste Management Authority for more information.

## 14 . TRANSPORT INFORMATION

**UN Number** Not regulated

**Proper Shipping Name** Not regulated

**Dangerous Goods Class** Not regulated

**Packing Group:** Not regulated

## 15 . REGULATORY INFORMATION

**Australian Inventory of Chemical Substances:**

7783-20-2 Sulfuric acid, diammonium salt

7732-18-5 Water

## 16 . OTHER INFORMATION

**Creation Date:** 23.01.2015

**Last Revision of MSDS:** 27-11-2009

**Abbreviations and acronyms:**

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

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LC<sub>50</sub>: Lethal concentration, 50 percent

LD<sub>50</sub>: Lethal dose, 50 percent

IARC: International Agency for Research on Cancer

STEL: Short Term Exposure Limit

TWA: Time Weighted Average

NES: National Exposure Standard (Safe Work Australia - Workplace Exposure Standards For Airborne Contaminants)

#### Disclaimer

This MSDS is prepared in accord with the Safe Work Australia document "Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals - December 2011"

The information contained in this material safety data sheet is provided in good faith and is believed to be accurate at the date of issuance. 4Farmers Pty Ltd makes no representation of the accuracy or comprehensiveness of the information and to the full extent allowed by law excludes all liability for any loss or damage related to the supply or use of the information in this material safety data sheet. The user is cautioned to make their own determinations as to the suitability of the information provided to the particular circumstances in which the product is used.