RICHGRO

ABN: 97 008 734 852

MATERIAL SAFETY DATA SHEET

SECTION 1 - IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name:	**Sulphate of Ammonia**
Other Names:	**Sulphate of ammonia, ammonium sulphate, amsul.**
Product Code:	BOM5700
Product Use:	**Fertiliser**
Company Name:	**Richgro Garden Products**
Company Address:	203 Acourt Road, Jandakot WA 6164
Telephone Number:	**(08) 6258 7100 or Toll free 1800 455 132**
Fax Number:	(08) 8455 1297 or Toll free 1800 671 297
Email:	customerservice@richgro.com.au
This version issued:	**December 2013** and is valid for 5 years from this date.

SECTION 2 - HAZARDS IDENTIFICATION

Statement of Hazardous Nature

Hazardous Substance: **Sulphate of Ammonia is not classified as hazardous** according to Safe Work Australia criteria.

Dangerous Goods: **Sulphate of Ammonia is not classified as a dangerous good** according to the ADG code.

SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	CAS No	Proportion of Ingredients
Ammonium Sulphate	7783-20-2	99%
Non hazardous impurities	-	Remainder

SECTION 4 - FIRST AID MEASURES

General Information:

Whenever fertilisers are in regular use ensure drinking water and eyewash facilities are available.

Inhalation:

If over exposure occurs remove affected person to a well ventilated area. Keep warm and at rest. In emergency situations, if breathing is difficult give oxygen. If the affected person suffers cardiac arrest commence cardio-pulmonary resuscitation immediately. Seek urgent medical attention.

Skin Contact:

Gently flush affected areas with water. Seek medical attention if irritation develops. Remove all contaminated clothing and launder before re-use.

Eye Contact:

Flush gently with running water for at least 15 minutes lifting lower and upper eyelids occasionally. Seek medical attention if irritation develops.

Ingestion:

If person is conscious, rinse mouth thoroughly with water immediately, and give water or milk to drink.
DO NOT induce vomiting. Seek medical attention, if more than a small quantity has been swallowed, or there is pain or difficulty with swallowing.

Advice to Doctor:

Treat symptomatically based on individual reactions of patient.

MATERIAL SAFETY DATA SHEET

SECTION 5 - FIRE FIGHTING MEASURES

Flammability: Non-flammable and does not support combustion.

Extinguishing Media: Non-flammable and does not support combustion.

Hazard from Combustion Products: Will form flammable and toxic gases at elevated temperatures (> 280°C) by thermal decomposition, yielding ammonia, sulfur oxides and nitrogen oxides.

Hazchem Code: None allocated.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Accidental release:
Any spillage should be cleaned up promptly and swept up. Prevent run-off into drains and waterways.

SECTION 7 - HANDLING AND STORAGE

Handling:
Keep away from alkalis and hypochlorites when transporting.

Storage:
Store in a cool, clean, dry and well ventilated area. Avoid contact with moisture, as it will cause product handling problems.

Store away from oxidizing agents, alkalis and chlorinating agents such as swimming pool chlorine.

SECTION 8 - EXPOSURE CONTROLS AND PERSONAL PROTECTION

National Exposure Standards No exposure standard has been established for this product by the ACGIH. However, ASGIH recommended value for inhalable particulates is 10mg/m3 TLV/TWA (for inspirable dust), and 3mg/m3 (for respirable dust).

Engineering Controls: Use in well ventilated areas. Avoid high dust concentration.

Personal Protective Equipment: Wear rubber or PVC gloves to prevent skin contact. Where dust is a problem use a P2 type canister Respirator. Wear long sleeves and long trousers to prevent contact. Wear chemical safety glasses to prevent eye contact.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical Description & colour:	White or slightly pink crystals.
Odour:	Not available.
Boiling Point/Range:	No data available.
Freezing/Melting Point:	235-280°C with decomposition.
Vapour Pressure:	Does not exert significant vapour pressure.
Vapour Density:	No data available.
% Volatiles:	Not available.
Bulk Density:	No data available
Specific Gravity:	1.769.
Solubility:	Soluble in water (76g / 100mL at 20°C), not soluble in alcohol or acetone.
pH:	4 – 6
Flammability:	Not flammable
Evaporation Rate:	No data available.
Upper & Lower flammable (explosive) limits in air:	Not relevant.
Flash point and method of Detecting flash point:	Not relevant.
Ignition temp:	Not available.

MATERIAL SAFETY DATA SHEET

SECTION 10 - STABILITY AND REACTIVITY

Reactivity: Slightly reactive with oxidizing agents. Sulphate of ammonia is a sensitiser, increasing explosion hazard of ammonium nitrate, potassium nitrate and potassium chlorate, when mixed together. If mixed with pool chlorine, i.e., calcium hypochlorite, or sodium hypochlorite, it can form a spontaneously explosive nitrogen trichloride.
Highly corrosive to aluminium, zinc, copper and brass. Slightly corrosive to mild steel and 304 stainless steel. Non-corrosive to 316 steel.

Decomposition products: Contact with alkalis will release ammonia gas.

SECTION 11 - TOXICOLOGICAL INFORMATION

Health Effects: Low toxicity. Use safe work practices to avoid eye or skin contact and dust inhalation. There is no known effect from chronic exposure to Sulphate of Ammonia.

Inhalation: High dust concentration of air-borne material may cause irritation to the nose and upper respiratory tract; symptoms may include coughing and sore throat.

Skin: Prolonged contact may cause some irritation, including redness and itching. No harmful effects from skin absorption have been recorded.

Eye: May cause irritation, redness and pain following contact.

Swallowed: Presents little toxicity, unless large amounts are ingested. Large amounts give rise to gastro-intestinal irritation, with symptoms such as nausea, vomiting and diarrhea.

TOXICITY DATA
Ammonium sulphate (7783-20-2)
LD50 (Intraperitoneal): 610 mg/kg (mouse)
TDLo (Ingestion): 1500 mg/kg (man - gastrointestinal effects)
LD50 (Ingestion): 640 mg/kg (mouse)
LDLo (Ingestion): 3500 mg/kg (domestic animal)

SECTION 12 - ECOLOGICAL INFORMATION

Environmental Impact:

It is not anticipated to cause any adverse effects to plants or animals.

SECTION 13 - DISPOSAL CONSIDERATIONS

Disposal:

Dispose of on a farm, or authorised waste facility in accordance with statutory requirements.

Clean up personnel should vacuum or wet sweep to avoid dust dispersal.

Contact the manufacturer if additional information is required.

Legislation

Dispose in accordance with relevant local legislation.

SECTION 14 - TRANSPORT INFORMATION

ADG Code: Non-Dangerous Goods according to the criteria of the Australian Dangerous Goods Code (ADG Code).
UN Number: None allocated
UN Proper Shipping Name: None allocated
Class and Subsidiary Risk: None allocated
Packing Group: None allocated
EPG: None allocated
Hazchem Code: None allocated

MATERIAL SAFETY DATA SHEET

SECTION 15 - REGULATORY INFORMATION

Australian Regulatory Information:
A poison schedule number has not been allocated to this product using the criteria in the Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP).

All chemicals listed on the Australian Inventory of Chemical Substances (AICS).

SECTION 16 - OTHER INFORMATION

This MSDS contains only safety-related information. For other data see product literature.

Acronyms:

ACGIH	American Conference of Government Industrial Hygienists
AICS	Australian Inventory of Chemical Substances
CAS number	Chemical Abstracts Service Registry Number
ES-Peak	Exposure Standard – Peak level
ES-Stel	Exposure Standard – Short term exposure level
ES-TWA	Exposure Standard – Time weighted average
LD Lo	The lowest dose in an animal study in which lethality occurred
LD50	Lethal Dose 50. The single dose of a substance that caused the death of 50% of an animal population from exposure to the substance by any route other than inhalation
mg/m3	Milligrams per cubic metre
mg/kg	Milligrams per kilogram
NOHSC	National Occupational Health and Safety Commission
pH	Relates to hydrogen ion concentration – this value will relate to a scale of 0 – 14 where 0 is highly acidic and 14 is high alkaline
SUSDP	Standard for the Uniform Scheduling of Drugs and Poisons
TC Lo	Toxic concentration low. It is the lowest concentration of a substance in air to which humans (or animals) have been exposed for any given period of time that has produced any toxic effect or produce a tumorigenic or reproductive effect on one or more members of the group of subjects.
t/m3	Tonnes per cubic metre

TO THE BEST OF OUR KNOWLEDGE THIS DOCUMENT COMPLIES WITH THE NATIONAL CODE OF PRACTICE FOR THE PREPARATION OF MATERIAL SAFETY DATA SHEETS 2ND EDITION [NOHSC:2011(2003)]

THIS MSDS SUMMARISES OUR BEST KNOWLEDGE OF THE HEALTH AND SAFETY HAZARD STATEMENT INFORMATION OF THE PRODUCT AND HOW TO SAFELY HANDLE AND USE THE PRODUCT IN THE WORKPLACE. EACH USER MUST REVIEW THIS MSDS IN THE CONTEXT OF HOW THE PRODUCT WILL BE HANDLED AND USED IN THE WORKPLACE, INCLUDING IN CONJUNCTION WITH OTHER PRODUCTS.

IF CLARIFICATION OR FURTHER INFORMATION IS NEEDED TO ENSURE THAT AN APPROPRIATE RISK ASSESSMENT CAN BE MADE, THE USER SHOULD CONTACT THE SAFETY AND EMERGENCY SERVICES DEPARTMENT, RICHGRO GARDEN PRODUCTS ON
(08) 6258 7100 (AUSTRALIA), +61 8 6258 7100 (OVERSEAS) SO WE CAN ATTEMPT TO OBTAIN ADDITIONAL INFORMATION FROM OUR SUPPLIERS

OUR RESPONSIBILITY FOR PRODUCTS SOLD IS SUBJECT TO OUR STANDARD TERMS AND CONDITIONS, A COPY OF WHICH IS SENT TO OUR CUSTOMERS AND IS ALSO AVAILABLE ON REQUEST.

RICHGRO GARDEN PRODUCTS RESERVES THE RIGHT TO MAKE CHANGES TO MATERIAL SAFETY DATA SHEETS WITHOUT NOTICE.

Please read all labels carefully before using product.