

Section 1 - Identification of Chemical Product and Company

Chemical Nature: Fertiliser
Trade Name: Ammonium Sulphate
Other name: Amos Spray Grade Adjuvant
Product Use: Spray Grade adjuvant (for herbicides)
Supplier: Barmac, a division of Amgrow Pty Ltd
Unit B2a, 3-29 Birnie Avenue
Lidcombe NSW 2141
Phone: (02) 9395 1200 (Office hours), Fax: (02) 9395 1241
www.barmac.com.au

Creation Date: December 2015 (valid for 5 years from this date)

Section 2 - Hazards Identification

Statement of Hazardous Nature

NOT CLASSIFIED AS HAZARDOUS ACCORDING TO THE CRITERIA OF SWA

NOT A DANGEROUS GOOD ACCORDING TO THE ADG CODE, IATA OR IMDG/IMSBC CRITERIA

Risk Phrases: Not Hazardous - No criteria found.

Safety Phrases: Not Hazardous - No criteria found.

SUSMP Classification: Not scheduled

ADG Classification: None allocated. Not a Dangerous Good according to Australian Dangerous Goods (ADG) Code, IATA or IMDG/IMSBC criteria.

UN Number: None allocated

GHS Signal word: **NONE. Not hazardous.**

PREVENTION

P102: Keep out of reach of children.

P262: Do not get in eyes, on skin, or on clothing.

P281: Use personal protective equipment as required.

RESPONSE

P353: Rinse skin or shower with water.

P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P370+P378: Not combustible. Use extinguishing media suited to burning materials.

STORAGE

P402+P404: Store in a dry place. Store in a closed container.

DISPOSAL

P501: Dispose of small quantities and empty containers by wrapping with paper and putting in garbage. For larger quantities, if recycling or reclaiming is not possible, use a commercial waste disposal service.

Emergency Overview

Physical Description & colour: White/off white crystalline solid

Odour: No odour

Major Health Hazards: No significant risk factors have been found for this product in normal use.

Section 3 - Composition/Information on Ingredients

<u>Ingredients</u>	<u>CAS No</u>	<u>Conc (%)</u>
Ammonium Sulphate	7783-20-2	>95

This is a commercial product whose exact ratio of components may vary slightly. Minor quantities of other non hazardous ingredients are also possible.

Section 4 - First Aid Measures

General Information: You should call The Poisons Information Centre if you feel that you may have been poisoned, burned or irritated by this product. The number is 13 1126 from anywhere in Australia and is available at all times. Have this SDS with you when you call.

Inhalation: Inhalation is not normally harmful. Recovery is rapid after removal from exposure. If symptoms are experienced, remove victim to fresh air. Seek medical attention if irritation persists or breathing difficulties arise

Skin Contact: Remove contaminated clothing and wash thoroughly with soap and water. Seek medical attention if irritation develops. Launder clothing before reuse.

Eye Contact: Hold eye open and flush gently with copious amounts of water for 15 minutes and seek medical attention.

Ingestion: If swallowed, immediately rinse mouth out with water. Give copious quantities of water to drink. Contact Poisons Information Centre or doctor immediately. **Do not induce vomiting.**

Advice to Doctor: Treat symptomatically

Section 5 - Fire Fighting Measures

Fire and Explosion Hazards: Non- flammable. No fire or explosion hazards exist.

Fire decomposition will result in toxic fumes of sulphur oxides

Extinguishing Media: Media to suit materials involved in fire.

Fire Fighting: If a significant quantity of this product is involved in a fire, call the fire brigade.

Flash point: Non Flammable

Upper Flammability Limit: Not applicable

Lower Flammability Limit: Not applicable

Auto ignition temperature: Not applicable

Flammability Class: Does not burn.

Hazchem Code: None allocated

Section 6 - Accidental Release Measures

Spillage: Minor spills do not normally need any special cleanup measures. In the event of a major spill, prevent spillage from entering drains or water courses. As a minimum, wear overalls, goggles and gloves. Stop leak if safe to do so, and contain spill. Sweep up and shovel or collect recovered product into labelled containers for recycling or salvage, and dispose of promptly. After spills, wash area preventing runoff from entering drains. If a significant quantity of material enters drains, advise emergency services. This material may be suitable for approved landfill. Ensure legality of disposal by consulting regulations prior to disposal. Thoroughly launder protective clothing before storage or re-use. Advise laundry of nature of contamination when sending contaminated clothing to laundry.

Section 7 - Handling and Storage

Handling: Before use carefully read the product label. Use of safe work practices are recommended to avoid eye or skin contact and inhalation. Observe good personal hygiene, including washing hands before eating. Prohibit eating, drinking and smoking in contaminated areas.

Storage: Store in cool, dry, well ventilated area removed from combustible materials, herbicides, fungicides and foodstuffs. Ensure containers are labelled, protected from physical damage and sealed when not in use. Keep from extreme heat and open flames and make sure that the product does not come into contact with substances listed under "Materials to avoid" in Section 10. Bagged fertilisers should be stored under cover and out of direct sunlight.

Section 8 - Exposure Controls and Personal Protection

Exposure Limits TWA (mg/mP3P) STEL (mg/mP3P) ADI (mg/Kg/day) NOEL (mg/Kg/day)

Exposure limits have not been set by SWA for any ingredients in product. The TWA exposure value is the average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5 day working week. There is a blanket limit of 10mg/m³ for dusts or mists when limits have not otherwise been established. The STEL (Short Term Exposure Limit) is an exposure value that should not be exceeded for more than 15 minutes and should not be repeated for more than 4 times per day. There should be at least 60 minutes between successive exposures at the STEL. The term "peak" is used when the TWA limit, because of the rapid action of the substance, should never be exceeded, even briefly. ADI means Acceptable Daily Intake and NOEL means No-observable-effect-level. Values taken from Australian ADI List, 31st March 2012

Personal Protection

The following Australian Standards will provide general advice regarding safety clothing and equipment:

Respiratory equipment: **AS/NZS 1715**, Protective Gloves: **AS 2161**, Industrial Clothing: **AS2919**, Industrial Eye Protection: **AS1336** and **AS/NZS 1337**, Occupational Protective Footwear: **AS/NZS2210**.

No special equipment is usually needed when occasionally handling small quantities. The following instructions are for bulk handling or where regular exposure in an occupational setting occurs without proper containment systems.

Ventilation: Avoid high dust concentration and provide local exhaust ventilation where necessary.

Eye Protection: Eye protection such as protective glasses or goggles is recommended when using this product.

Skin Protection: Wear gloves or gauntlets and long sleeves when using this product to protect against skin irritation

Respirator: Use P2 type canister respirator where high concentrations of airborne dust is present

Provision of eye wash facilities and safety shower recommended.

Wash hands before eating, drinking, smoking or going to toilet, launder protective clothing before re-use.

Section 9 - Physical and Chemical Properties:

Physical Description & colour: White to off white crystalline solid

Odour: No odour

Boiling Point: Not applicable.

Melting Point: no data

Decomposition Temperature: 282°C

Flash Point: Non-flammable

Vapour Pressure: N/A

Specific Gravity: 1.7@ 20°C

Solubility: Soluble

pH (1% solution): 5-7

Auto ignition temp: Not applicable

Vapour Density: Not applicable.

Evaporation Rate: Not applicable.

Coeff Oil/water Distribution: No data

Viscosity: Not applicable.

Section 10 - Stability and Reactivity

Reactivity: This product is unlikely to react or decompose under normal storage conditions.

Conditions to Avoid: Heat, flames.

Incompatibilities: Bases, oxidising agents

Fire Decomposition Products: Ammonia & sulphur trioxides

Polymerisation: This product is unlikely to undergo polymerisation processes.

Section 11 - Toxicological Information

Potential Health Effects

Ingestion: Can cause considerable gastric upset, ulceration or haemorrhage of the gastrointestinal tract. Systemic ammonia poisoning possible if large quantities are digested.

Eye Contact: This product is moderately irritating to the eyes. It will cause discomfort such as stinging pain, watering and redness of the eyes. Effects may last after exposure has ceased, and in severe exposure, long lasting or even permanent effects such as corneal damage can occur

Skin: Dust may cause irritation to skin.

Inhalation: Inhalation of dust may cause irritation to the respiratory tract. Symptoms may include coughing and shortness of breath.

Chronic Effects: Repeated or prolonged contact with dilute solutions may cause skin irritation.

Carcinogen Status:

SWA: No significant ingredient is classified as carcinogenic by SWA

NTP: No significant ingredient is classified as carcinogenic by NTP.

IARC: No significant ingredient is classified as carcinogenic by IARC.

Toxicity to Animals:

Oral (Rat): LD50=2840 mg/kg

Classification of Hazardous Ingredients

Ingredient

Risk Phrases

No ingredient mentioned in the HSIS Database is present in this product at hazardous concentrations

Section 12 - Ecological Information

Aquatic organisms: No data available, but high levels will produce toxic salting effects.

Flora: No data available, but levels below $\approx 100 \text{ kg/m}^2$ (10 g/m^2) on soil are beneficial to plant growth.

Higher levels may produce toxic salting effects

Bees: Not toxic.

Persistence/degradation: Will persist for weeks in soil, but is a plant nutrient.

Mobility: Readily leaches, especially the nitrate component.

Bioaccumulative potential: Unknown but probably low. Plants assimilate it readily, but convert this to protein

Section 13 - Disposal Considerations

Disposal: There are many pieces of legislation covering waste disposal and they differ in each state and territory, so each user must refer to laws operating in their area. In some areas, certain wastes must be tracked. The Hierarchy of Controls seems to be common - the user should investigate: Reduce, Reuse, and Recycle and only if all else fails should disposal be considered. Special help is available for the disposal of Agricultural Chemicals. The product label will give general advice regarding disposal of small quantities, and how to cleanse containers. However, for help with the collection of unwanted rural chemicals, contact ChemClear 1800 008 182 <http://www.chemclear.com.au/> and for help with the disposal of empty drums, contact DrumMuster <http://www.drummuster.com.au/>

Section 14 - Transport Information

ADG Code: This product is NOT classified as a Dangerous Good.

Not a Dangerous Good for transport by sea or air

Section 15 - Regulatory Information

Poison Schedule: A poison schedule number has not been allocated to this product using the criteria in the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP)

AICS: All of the significant ingredients in this formulation are to be found in the public AICS Database.

Section 16 - Other Information

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

Acronyms:

ADG Code	Australian Code for the Transport of Dangerous Goods by Road and Rail	IMSBC	International Maritime Solid Bulk Code
AICS	Australian Inventory of Chemical Substances	NOHSC	National Occupational Health and Safety Commission
ASCC	Australian Safety & Compensation Council	NTP	National Toxicology Program (USA)
CAS number	Chemical Abstracts Service Registry Number	R-Phrase	Risk Phrase
Hazchem Number	Emergency action code of numbers and letters that provide information to emergency services especially fire-fighters	SUSMP	Standard for the Uniform Scheduling of Medicines & Poisons
IARC	International Agency for Research on Cancer	SWA	Safe Work Australia (formerly ASCC and NOHSC)
IATA	International Air Transport Authority	UN Number	United Nations Number
IMDG	International Maritime Dangerous Good		

THIS SDS SUMMARISES OUR BEST KNOWLEDGE OF THE HEALTH AND SAFETY HAZARD INFORMATION OF THE PRODUCT AND HOW TO SAFELY HANDLE AND USE THE PRODUCT IN THE WORKPLACE. EACH USER MUST REVIEW THIS SDS IN THE CONTEXT OF HOW THE PRODUCT WILL BE HANDLED AND USED IN THE WORKPLACE. IF CLARIFICATION OR FURTHER INFORMATION IS NEEDED TO ENSURE THAT AN APPROPRIATE RISK ASSESSMENT CAN BE MADE, THE USER SHOULD CONTACT THIS COMPANY 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.

Please read all labels carefully before using product.

This SDS is prepared in accord with the SWA document "National Code of Practice for the Preparation of Material Safety Data Sheets" 2nd Edition [NOHSC:2011(2003)]

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