

Section 1. IDENTIFICATION

Product Name:	AMMONIUM SULPHATE
Other Names:	Ammonium Sulfate (2:1); Diammonium Sulfate; Diammonium Sulphate; Sulfuric Acid, Diammonium Salt
Uses:	Laboratory chemicals, Manufacture of substances
Chemical Family:	No Data Available
Chemical Formula:	H ₈ N ₂ O ₄ S
Chemical Name:	Ammonium Sulphate
Product Description:	No Data Available

CONTACT DETAILS OF THE SUPPLIER OF THIS SAFETY DATA SHEET

Business:	Colonial Chemicals Australia		
Address:	Skewes Road, Bendemeer, NSW, AUSTRALIA,2355		
Postal Address:	P.O Box 167 Moonbi, NSW,2353		
Phone:	02 67 696 658	Mobile: 0427 696658	Fax: 02 57015137
Email:	admin@colonialchemicals.com.au		
Web Site:	www.colonialchemicals.com.au		

Emergency Contact Details -For emergencies only; DO NOT contact these companies for general product advice.

Poisons Information Centre -Westmead NSW 131126 or 1800-251525

Chemcall Australia 1800-127406

Section 2. HAZARD IDENTIFICATION

Poisons Schedule (Aust)	Not scheduled
Globally Harmonised System	
Hazard Classification	NOT hazardous according to the criteria of the Globally Harmonised System of Classification and Labelling of Chemicals (GHS)
Signal Word	None

National Transport Commission (Australia)

Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

Dangerous Goods Classification NOT Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

Section 3. COMPOSITION / INFORMATION ON INGREDIENTS

INGREDIENTS

CHEMICAL ENTITY	FORMULA	CAS NUMBER	PROPORTION%
Ammonium Sulphate	No Data Available	7783-20-2	>99.0 %

SAFETY DATA SHEET

Product: Ammonium Sulphate

Issued by: Colonial Chemicals Australia

Issue date: 13/04/2014

Phone: 02 67 696 658

Poisons Information Centre 131126 or Technical Officer 02 67 696 658

Section 4. FIRST AID MEASURES

Description of necessary measures according to routes of exposure

Swallowed	Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician. Show this safety data sheet to the doctor in attendance.
Eye	Flush eyes with water as a precaution. Consult a physician. Show this safety data sheet to the doctor in attendance.
Skin	Wash off with soap and plenty of water. Consult a physician. Show this safety data sheet to the doctor in attendance.
Inhaled	If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician. Show this safety data sheet to the doctor in attendance.
Advice to Doctor	Treat symptomatically based on judgement of doctor and individual reactions of patient.
Medical Conditions Aggravated by Exposure	No information available on medical conditions aggravated by exposure to this product.

Section 5. FIRE FIGHTING MEASURES

General Measures	Clear fire area of all non-emergency personnel. Stay upwind. Keep out of low areas. Eliminate ignition sources. Move fire exposed containers from fire area if it can be done without risk.
Flammability Conditions	The product itself does not burn.
Extinguishing Media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Water, Water spray, Carbon dioxides and dry chemical powder.
Fire and Explosion Hazard	Product is a non-flammable solid.
Hazardous Products of Combustion	In case of combustion, toxic fumes are emitted: Nitrogen oxides (NOx), Sulphur oxides , Ammonia gas.
Special Fire Fighting Instructions	Do NOT allow fire fighting water to reach waterways, drains or sewers. Store fire fighting water for treatment.
Personal Protective Equipment	Fire fighters should wear a positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots and gloves).
Flash Point	No Data Available
Lower Explosion Limit	No Data Available
Upper Explosion Limit	No Data Available
Auto Ignition Temperature	No Data Available
Hazchem Code	No Data Available

Section 6. ACCIDENTAL RELEASE MEASURES

General Response Procedure	Avoid accidents, clean up immediately. Slippery when spilt. Eliminate all sources of ignition. Increase ventilation. Avoid generating dust. Stop leak if safe to do so. Isolate the danger area. Use clean, non-sparking tools and equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Avoid breathing dust.
Clean Up Procedures	Contain and sweep/shovel up spills with dust binding material or use an industrial vacuum cleaner. Transfer to a suitable, labeled container and dispose of promptly.
Containment	Stop leak if safe to do so. Isolate the danger area.
Decontamination	Cover with waterproof sheet and avoid raising dust. Be careful not to produce dust as much as possible.
Environmental Precautionary Measures	Do NOT let product reach drains or waterways. If product does enter a waterway, advise the Environmental Protection Authority or your local Waste Management. Due to NH4+ and its high water solubility, it may be harmful to aquatic organisms.
Evacuation Criteria	Evacuate all unnecessary personnel.
Personal Precautionary Measures	Personnel involved in the clean up should wear full protective clothing as listed in section 8.

SAFETY DATA SHEET

Product: Ammonium Sulphate
Issued by: Colonial Chemicals Australia

Issue date: 13/04/2014
Phone: 02 67 696 658

Poisons Information Centre 131126 or Technical Officer 02 67 696 658

Section 7. HANDLING AND STORAGE

Handling	Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Wear proper protective equipment to avoid inhalation of dust. Good local exhaust ventilation. Avoid rough handling.
Storage	Store in a cool, dry, well-ventilated area. Keep containers tightly closed when not in use. Inspect regularly for deficiencies such as damage or leaks. Protect against physical damage. Store away from incompatible materials as listed in section 10. Not be exposed to the air long time because this product has little hygroscopic. Store in dry place with low humidity. This product is not classified dangerous for transport according to The Australian Code for the Transport of Dangerous Goods By Road and Rail.
Container	Store in original packaging as approved by manufacturer. Poly ethylene, Poly propylene, Paper, hemp and chloroethylene are resistant as containers and packaging.

Section 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

General	No exposure standard has been established for this product by the Australian Safety and Compensation Council (ASCC). However, the exposure standard for dust not otherwise specified is 10mg/m ³ (for inspirable dust) and 3mg/m ³ (for respirable dust). NOTE: The exposure value at the TWA is the average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5 day working week. These exposure standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. These exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.
Exposure Limits	No Data Available
Biological Limits	No information available on biological limit values for this product.
Engineering Measures	A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area.
Personal Protection Equipment	RESPIRATOR: Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 or type P1 dust masks (AS1715/1716). EYES: Safety glasses with side shields (AS1336/1337). HANDS: Nitrile gloves (AS2161). CLOTHING: Chemical-resistant coveralls and safety footwear (AS3765/2210).
Special Hazards Precautions	Further details on Personal protective equipment: Eye/face protection: Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Skin protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. Full contact: Material: Nitrile rubber Minimum layer thickness: 0.11 mm Break through time: 480 min Splash contact: Material: Nitrile rubber Minimum layer thickness: 0.11 mm Break through time: 480 min If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario. Body Protection: Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
Work Hygienic Practices	Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

SAFETY DATA SHEET

Product: Ammonium Sulphate
Issued by: Colonial Chemicals Australia

Issue date: 13/04/2014
Phone: 02 67 696 658

Poisons Information Centre 131126 or Technical Officer 02 67 696 658

Section 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Solid
Appearance	Crystalline (rhombic or grained crystal)
Odour	Odourless
Colour	White
pH	5 - 6 132 g/L (25 deg C)
Vapour Pressure	No Data Available
Relative Vapour Density	No Data Available
Boiling Point	No Data Available
Melting Point	>280 °C
Freezing Point	No Data Available
Solubility	132 g/L (Completely Soluble) 20°C
Specific Gravity	No Data Available
Flash Point	No Data Available
Auto Ignition Temp	No Data Available
Evaporation Rate	No Data Available
Bulk Density	No Data Available
Corrosion Rate	No Data Available
Decomposition Temperature	No Data Available
Density	1.77 g/cm ³ Relative
Specific Heat	No Data Available
Molecular Weight	132.14 g/mol
Net Propellant Weight	No Data Available
Octanol Water Coefficient	-5.1 (25 deg C)
Particle Size	No Data Available
Partition Coefficient	No Data Available
Saturated Vapour Concentration	No Data Available
Vapour Temperature	No Data Available
Viscosity	No Data Available
Volatile Percent	No Data Available
VOC Volume	No Data Available
Additional Characteristics	Fat solubility: Insoluble to acetone, ethyl alcohol and carbon disulphide.
Potential for Dust Explosion	No Data Available
Fast or Intensely Burning Characteristics	No Data Available
Flame Propagation or Burning Rate of Solid Materials	No Data Available
Non-Flammables That Could Contribute Unusual Hazards to a Fire	No Data Available
Properties That May Initiate or Contribute to Fire Intensity	No Data Available
Reactions That Release Gases or Vapours	Decomposition may emit flammable ammonia gas.
Release of Invisible Flammable Vapours and Gases	No Data Available

Section 10. STABILITY AND REACTIVITY

Chemical Stability	Product is stable under normal conditions of use, storage and temperature.
Conditions to Avoid	No Data Available
Materials to Avoid	Strong oxidizing agents (chlorates, nitrites and nitrates), Strong bases.
Hazardous Decomposition Products	Start decomposition at 120 deg C, Melting at 357 deg C then ammonium hydrogen sulphide and ammonia occur. Form ammonia gas with strong alkalis. Ammonia gas and sulphur dioxide.
Hazardous Polymerisation	No Data Available

SAFETY DATA SHEET

Product: Ammonium Sulphate
Issued by: Colonial Chemicals Australia

Issue date: 13/04/2014
Phone: 02 67 696 658

Poisons Information Centre 131126 or Technical Officer 02 67 696 658

Section 11. TOXICOLOGICAL INFORMATION

General Information	Acute toxicity : Oral LD50 Rat: 2840 mg/kg Skin corrosion/irritation: Skin - rabbit Result: No skin irritation Skin - Human Result: Mild skin irritation Serious eye damage/eye irritation Eyes - rabbit Result: No eye irritation Eyes - Human Result: Mild eye irritation Mutagenicity: Ames test: Negative Chromosome abnormal test: Negative Reproductive toxicity : Inhalation toxicity test (Rats, 0.3 mg/l, 8h/day, for 14 days) : Negative Carcinogenicity: IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.
Carcinogen Category	No Data Available

Section 12. ECOLOGICAL INFORMATION

Ecotoxicity	Toxicity to fish - <i>Oncorhynchus mykiss</i> (rainbow trout): LC50: 36.7 mg/l - 96 h LD50: 420 mg/L 96 h Toxicity to daphnia and other aquatic invertebrates: LC50: 433 mg/l 50 h EC50: 129 mg/L 48 h
Persistence/Degradability	No Data Available
Mobility	No Data Available
Environmental Fate	Do NOT contaminate waterways, drains or sewers. Harmful to aquatic life.
Bioaccumulation Potential	No Data Available
Environmental Impact	No Data Available

Section 13. DISPOSAL CONSIDERATIONS

General Information	Dispose of in accordance with all local, state and federal regulations. All empty packaging should be disposed of in accordance with Local, State, and Federal Regulations or recycled/reconditioned at an approved facility.
Special Precautions for Land Fill	Contact a specialist disposal company or the local waste regulator for advice. Recycling and recovery the product if possible as fertilizer or effectively used for farm crops to diluted with water. Do not dispose near reactive substance like sodium hydroxide and high temperature place. Disposal must be in accordance with current national and local regulations or ask authorized industrial waste treatment agents which have capability of treatment. Do not dump this material into sewers, on the ground or into any body of water.

SAFETY DATA SHEET

Product: Ammonium Sulphate
Issued by: Colonial Chemicals Australia

Issue date: 13/04/2014
Phone: 02 67 696 658

Poisons Information Centre 131126 or Technical Officer 02 67 696 658

Section 14. TRANSPORT INFORMATION

Land Transport (Australia)

ADG Code

Proper Shipping Name	AMMONIUM SULPHATE
Class	No Data Available
Subsidiary Risk(s)	No Data Available No Data Available
UN Number	No Data Available
Hazchem	No Data Available
Pack Group	No Data Available
Special Provision	No Data Available

Sea Transport

IMDG Code

Proper Shipping Name	AMMONIUM SULPHATE
Class	No Data Available
Subsidiary Risk(s)	No Data Available
UN Number	No Data Available
Hazchem	No Data Available
Pack Group	No Data Available
Special Provision	No Data Available
EMS	No Data Available
Marine Pollutant	No

Air Transport

IATA

Proper Shipping Name	AMMONIUM SULPHATE
Class	No Data Available
Subsidiary Risk(s)	No Data Available
UN Number	No Data Available
Hazchem	No Data Available
Pack Group	No Data Available
Special Provision	No Data Available

National Transport Commission (Australia)

Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

Dangerous Goods Classification **NOT** Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

Section 15. REGULATORY INFORMATION

General Information	No Data Available
Poisons Schedule (Aust)	Not scheduled
National/Regional Inventories Australia (AICS)	Listed

SAFETY DATA SHEET

Product: Ammonium Sulphate
Issued by: Colonial Chemicals Australia

Issue date: 13/04/2014
Phone: 02 67 696 658

Poisons Information Centre 131126 or Technical Officer 02 67 696 658

Section 16. OTHER INFORMATION

Always use product as directed. Please read all labels carefully before using product. Further information may be obtained by contacting the Technical Officer on 0267 696 658. Supplied by Colonial Chemicals Australia.

SDS Revision Number: 1
SDS Revision Date: 13 April 2014
Reason for issue: Creation SDS (Replaces MSDS version 4 Dated 01/04/2014)
In any event, the review and, if necessary, the re-issue of a SDS shall be no longer than 5 years after the last date of issue.

The information sourced for the preparation of this document was correct and complete at the time of writing to the best of the writer's knowledge. The document represents the commitment to the company's responsibilities surrounding the supply of this product, undertaken in good faith. This document should be taken as a safety guide for the product and its recommended uses but is in no way an absolute authority. Please consult the relevant legislation and regulations governing the use and storage of this type of product.

Key legend/Abbreviations/Acronyms that may be used in this S.D.S.:

<	Less Than
>	Greater Than
ADG Code	Australian Code for the Transport of Dangerous Goods by Road and Rail (7th edition)
AICS	Australian Inventory of Chemical Substances
atm	Atmosphere
CAS	Chemical Abstracts Service (Registry Number)
cm ²	Square Centimetres
CO ₂	Carbon Dioxide
COD	Chemical Oxygen Demand
deg C (°C)	Degrees Celcius
deg F (°F)	Degrees Farenheit
EPA (New Zealand)	Environmental Protection Authority of New Zealand
g	Grams
g/cm ³	Grams per Cubic Centimetre
g/l	Grams per Litre
Hazchem Code	Emergency action code of numbers and letters that provide information to emergency services especially
firefighters HSNO	Hazardous Substance and New Organism
IDLH	Immediately Dangerous to Life and Health
immiscible	Liquids are insoluble in each other. inHg
inHg	Inch of Mercury
inH ₂ O	Inch of Water
K	Kelvin
kg	Kilogram
kg/m ³	Kilograms per Cubic Metre
lb	Pound
LC	stands for lethal concentration.
LC ₅₀	is the concentration of a material in air which causes the death of 50% (one half) of a group of test animals. The material is inhaled over a set period of time, usually 1 or 4 hours.
LD	stands for Lethal Dose.
LD ₅₀	is the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals.
ltr or L	Litre
m ³	Cubic Metre
mbar	Millibar
mg	Milligram
mg/24H	Milligrams per 24 Hours
mg/kg	Milligrams per Kilogram
mg/m ³	Milligrams per Cubic Metre
Misc or Miscible	Liquids form one homogeneous liquid phase regardless of the amount of either component present
mm	Millimetre
mmH ₂ O	Millimetres of Water
mPa.s	Millipascals per Second
N/A	Not Applicable
NIOSH	National Institute for Occupational Safety and Health
NOHSC	National Occupational Health and Safety Commission
OECD	Organisation for Economic Co-operation and Development
Oz	Ounce
Pa	Pascal
PEL	Permissible Exposure Limit
pH	relates to hydrogen ion concentration using a scale of 0 (high acidic) to 14 (highly alkaline).
ppb	Parts per Billion
ppm	Parts per Million
ppm/2h	Parts per Million per 2 Hours
ppm/6h	Parts per Million per 6 Hours
psi	Pounds per Square Inch
R	Rankine
RCP	Reciprocal Calculation Procedure
SDS	Safety Data Sheet
STEL	Short Term Exposure Limit
TLV	Threshold Limit Value
tne	Tonne
TWA	Time Weighted Average (TWA/ES - Time Weighted Average or Exposure Standard)
Ug/24	Micrograms per 24 Hours
UN	United Nations
Wt	Weight

END OF SDS

SAFETY DATA SHEET

Product: Ammonium Sulphate
Issued by: Colonial Chemicals Australia

Issue date: 13/04/2014
Phone: 02 67 696 658

Poisons Information Centre 131126 or Technical Officer 02 67 696 658