

1. CHEMICAL IDENTIFICATION AND COMPANY INFORMATION

Product Identifiers

Product Name: Ammonium Nitrate, ACS Reagent
Product Number: A300

Other means of identification

Synonyms: Nitric Acid, Ammonium salt, Security Sensitive Ammonium Nitrate (SSAN).

Recommended Use For Research/Laboratory Use ONLY

Restrictions on Use Products manufactured by PhytoTechnology Laboratories and supplied by Austratec Pty Ltd are intended for research and laboratory use ONLY. Products are NOT to be used as human or animal therapeutics, cosmetics, agricultural or pesticidal products, food additives, or as household chemicals.

Details of Importer/Supplier

Company: Austratec Pty Ltd, Factory 12/49 Corporate Blvd, Bayswater VIC 3153, AUSTRALIA
Telephone: +61 3 9729 4528
Fax: +61 3 9729 4578
Website: www.austratec.com.au

Emergency phone number 13 11 26 (24 hour – Poisons Information Centre)

2. HAZARD(S) IDENTIFICATION

GHS Classification Oxidizing solids (Category 3)
Skin irritation (Category 2)
Eye irritation (Category 2A)
Specific target organ toxicity – Respiratory system – single exposure (Category3)

GHS Label elements, including precautionary statements

Pictogram:  Signal Word: **WARNING**

Hazard Statement(s) H272 – May intensify fire; oxidizer
H315 – Causes skin irritation
H319 – Causes serious eye irritation
H335 – May cause respiratory irritation

Precautionary statement(s)

Prevention: P210 – Keep away from heat.
P220 – Keep/Store away from clothing/combustible materials.
P221 – Take any precaution to avoid mixing with combustibles.
P261 – Avoid breathing dust/fumes.
P264 – Wash hands thoroughly after handling.
P271 – Use only outdoors or in a well-ventilated area.
P280 – Wear protective gloves/eye protection/face protection.

Response: P302 + P352 - IF ON SKIN: Wash with plenty of soap and water.
P304 + P340 - IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
P312 - Call a POISON CENTER or doctor/physician if you feel unwell.
P332 + P313 - If skin irritation occurs: Get medical advice/attention.
P362 - Take off contaminated clothing and wash before reuse.
P370 + P378 – In case of fire: Use dry sand, dry chemical or alcohol resistant form of extinction.

Storage: P403 + P223: Store in a well-ventilated place. Keep container tightly closed.
P405 - Store locked up.

Disposal: P501 – Dispose contents/container to an approved chemical waste disposal plant.

3. COMPOSITION AND INFORMATION ON INGREDIENTS

CAS Number: 6484-52-2 EC Number: 229-347-8
Formula: NH_4NO_3 Molecular Weight: 80.04 g/mol

INGREDIENT	CAS NUMBER	PERCENTAGE	HAZARDOUS
Ammonium Nitrate	6484-52-2	>98%	No exposure limits established by OSHA or ACGIH

4. FIRST AID MEASURES

Description of first aid measures

General advice: Consult a doctor/physician. Show this safety data sheet to the doctor in attendance.

Ingestion: MAY CAUSE IRRITATION IF SWALLOWED. If swallowed, wash mouth out with water. Never give anything by mouth to an unconscious person. Seek medical attention.

Inhalation: MAY CAUSE IRRITATION TO RESPIRATORY TRACT. Safely remove person to fresh air. If not breathing, begin cardiopulmonary resuscitation (CPR). If breathing is difficult, ensure clear airway and give oxygen. Seek medical attention.

Eye contact: DIRECT CONTACT MAY CAUSE IRRITATION, REDNESS, TEARING, OR BLURRED VISION. Flush eye out immediately with water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Seek medical attention if irritation persists.

Skin contact: MAY CAUSE IRRITATION, REDDENING, ITCHING OR INFLAMATION. Wash area thoroughly with soap and water. Remove and wash contaminated clothing. Seek medical attention.

Most important symptoms and effects, both acute and delayed

See section 2 and/or section 11

Recommendation for immediate medical attention and special treatment needed

No data available

5. FIRE FIGHTING MEASURES

Suitable extinguishing media Water spray, carbon dioxide, dry chemical powder, or appropriate foam. Use extinguishing media suitable for surrounding fire.

Specific hazards arising from the chemical

Hazardous combustion products: May emit toxic fumes under fire conditions.

Toxic gases produced: Nitrogen oxides.

Special protective equipment and precaution for firefighters

In the event of fire, wear full protective clothing and NIOSH (US) or EN145 (EU) approved self contained breathing apparatus. Evacuate the area and fight fire from a safe distance.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Use personal protection equipment (PPE) recommended in Section 8. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation especially in confined areas. Evacuate personnel to safe areas. Avoid breathing dust.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Methods and materials for containment and cleanup

Wear suitable protective clothing. Avoid dust formation. Carefully sweep up and remove. Place in a dry container and cover. Remove from area for safe disposal (see section 13). Flush spill area with water. Do not let product enter drain.

7. HANDLING AND STORAGE

Precautions for safe handling

Avoid contact with skin and eyes. Avoid dust formation and aerosols. Avoid incompatible substances. Provide appropriate exhaust ventilation where dust is formed. Keep away from heat sources of ignition. No smoking. Wash thoroughly after use.

Conditions for safe storage

Keep in a tightly closed container and store in a cool, dry and well ventilated area. Product is hygroscopic, protect from moisture.

Recommended Storage Temperature

Room Temperature

Incompatibilities

Reducing agents, powdered metals, strong acids.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure control measures

Australian Exposure Standards (TWA;STEL): No data available

OSHA's permissible exposure limits (PEL's): No data available

ACGIH threshold limit values (TLV's): No data available

Engineering controls

Handle in accordance to general industrial hygiene and chemical safety practice.

Personal protective equipment (PPE)

Eye Face Protection:

Chemical safety shield, glasses or goggles approved under NIOSH (US) or EN166 (EU). Have eye washing facilities readily available where eye contact can occur.

Skin Protection:

Suitable protective gloves.

Body Protection:

Lab coat or protective chemical suit. Protective equipment must be selected in accordance to the amount of dangerous substance within the specific workplace.

Respiratory Protection:

Use an appropriate dust mask. Use N95 (US) or type P1 (EN143) dust mask where dust level is a nuisance. Appropriate respirator approved under NIOSH (US) or CEN (EU).

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Clear to white crystals.

Odour

Odourless.

Odour threshold	No data available
pH (1.60 g/L)	4.75 – 5.75
Melting point	169°C
Initial boiling point/boiling range	210°C
Flash point (closed cup)	No data available
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Flammable limits (upper %)	No data available
Flammable limits (lower %)	No data available
Vapour pressure	No data available
Vapour density	No data available
Relative density	1.72 g/cm ³ @ 20°C
Solubility	Soluble in water.
Partition coefficient (n-octanol/water)	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available

10. STABILITY AND REACTIVITY

Reactivity	No data available
Chemical stability	Stable under normal conditions of use and recommended storage conditions. Product is hygroscopic.
Possibility of hazardous reactions	No data available
Conditions to avoid	Moisture, heat, shock, flame, dust generation.
Incompatible materials	Reducing agents, powdered metals, strong acids.
Hazardous decomposition products	Nitrogen oxides, ammonia.

11. TOXICOLOGICAL INFORMATION

Acute toxicity	LD ₅₀ (Oral, Rat)(mg/Kg):	2217
	LD ₅₀ (Unreported route, Mouse)(mg/Kg):	2085
	LD ₅₀ (Dermal, Rabbit)(mg/Kg):	No data available
Skin corrosion/irritation	No data available	
Serious eye damage/irritation	No data available	
Respiratory or skin sensitisation	No data available	
Germ cell mutagenicity	No data available	

Carcinogenicity	NTP:	No
	IARC:	No
	Z List:	No
	OSHA Reg:	No
Reproductive toxicity	No data available.	
Specific target organ toxicity (STOT)	Single Exposure:	Inhalation – may cause irritation
	Repeated Exposure:	No data available
Aspiration hazard	No data available	
Target organs	Stomach	
Medical conditions aggravated by exposure	No data available	
Routes of entry	Inhalation and ingestion.	
Symptoms associated with overexposure	Gastrointestinal upset, abdominal pain, blood disorders.	
NIOSH/RTECS No.	BR9050000	

The toxicological properties of this product have not been thoroughly investigated.

12. ECOLOGICAL INFORMATION

Ecotoxicity	No data available
Persistence and degradability	No data available
Bioaccumulative potential	No data available
Mobility in soil	No data available
Other adverse effects	No data available

13. DISPOSAL CONSIDERATIONS

Disposal procedure	Dispose in accordance with all applicable government, state, and environmental chemical safety practices.
EPA hazardous waste number	No data available.

14. TRANSPORT INFORMATION

UN number	ADG: 1942 (Ammonium Nitrate) IMDG: 1942 (Ammonium Nitrate) IATA: 1942 (Ammonium Nitrate)
Proper shipping/technical name	AMMONIUM NITRATE
Hazard Class	5.1 Oxidizing Agent
Packing group	III
Environmental hazards	No data available
Special precautions	Oxidizer

15. REGULATORY INFORMATION

Notification Status This product is classified as a HAZARDOUS CHEMICAL

Australia (AICS): Listed

New Zealand (NZIoC): Not determined

USA (TSCA): Listed

SARA TITLE III: Section 302 (EHS) Ingredients: No
 Section 313 Ingredients: No
 Section 304 (EHS/CERCLA) Ingredients: No
 Section 311/312 Hazard: Reactivity hazard, acute health hazard, chronic health hazard.

16. OTHER INFORMATION

HMIS Rating:	Health Hazard	Chronic Health Hazard	Flammability	Physical Hazard
	2	*	0	1
NFPA Rating:	Health Hazard	Fire Hazard	Reactivity Hazard	Special Hazard
	2	0	1	OX

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