



MATERIAL SAFETY DATA SHEET

PRODUCT: UREA FERTILISER – GRANULAR

Date of Issue: 16 AUG 2021 **Valid until:** 15 AUG 2026

GHS Format

1. IDENTIFICATION OF MATERIAL & SUPPLIER

Product (material) Name: Manutec UREA - Granular

Other names: Carbamide

Manufacturer's code: MBP0200 (2 KG)

Recommended use: as a granular fertiliser which is rich in Nitrogen to greening of grass and suitable for all types of Lawn grass.

Manufacturer/Supplier Information:

Name: MANUTEC PTY LTD

Address: 30 Jonal drive, Cavan, South Australia 5094

Telephone No: +61-8-8260 2277 **Fax:** +61-8-8260 2399

Email: manutec@manutec.com.au

Emergency contact only: Poisons Information Centre (Australia) 131126

2. HAZARDS IDENTIFICATION

Poisons Schedule: None classified

Hazard Classification: NOT hazardous according to the criteria of the Globally Harmonised System of Classification and Labelling of Chemicals (GHS)

Hazard Categories: None specified

Pictograms: None specified

Signal Word: None specified

Hazard Statements: None specified

Precautionary Statements: None specified

National Transport Commission (Australia)

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)

3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Chemical Entity</u>	<u>CAS Number</u>	<u>Proportion</u>
Urea	57-13-6	100%

4. FIRST AID MEASURES

If poisoning occurs, please contact immediately Poisons Information Centre (Australia) on 131126

Ingestion:	Rinse mouth and then drink plenty of water. Do NOT induce vomiting. Seek medical advice immediately.
Eye:	Flush with flowing water for 10-15 minutes. If irritation persists, seek immediate medical advice.
Skin:	Remove contaminated clothing. Wash affected part with soap and clean water. Any symptoms such as swelling, redness, blister or irritation occurs, seek immediate medical attention.
Inhaled:	Not dusty, however in a large scale handling if exposed to material inhalation, remove victim to fresh air. Remove contaminated clothing and make victim comfortable position. Seek medical help if victim still uncomfortable and develop any symptoms.
Aid Facilities:	Poisons Information Centres in each State capital city may provide additional assistance (Ph 131126).
Advice to doctor:	No special advice, treat symptomatically.

5. FIRE FIGHTING MEASURES

Hazchem code: Not applicable

Extinguishing media:

Material is non-combustible, however if caught in fire use Water spray/fog, foam, dry agent (carbon dioxide/dry chemical powder)

Special protective equipment for firefighters:

On decomposition, may emit toxic fumes, so fire fighters to wear appropriate clothing and self contained breathing apparatus.

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.

Clean Up Procedures: Contain and sweep/shovel up spills with dust binding material or use an industrial vacuum cleaner. Transfer to a suitable, labelled container and dispose of promptly.

7. HANDLING AND STORAGE

- Avoid Skin, eye contact and inhalation of dust.
- Store in a dry, cool and ventilated place away from Children, pets and exposure to direct sunlight. Also store away from any incompatible materials described in section 10 of this safety data sheet.
- When not in use and after use, ensure to keep the container/bag sealed properly.
- If any spillage, follow appropriate action as described in section 6 of this data sheet.
- Store in original packaging as approved by supplier

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/m³ (for inspirable dust) and 3mg/m³ (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.

The following has also been provided by the manufacturer:

DNEL - Workers:	dermal, acute, short term, systemic effects - 580 mg/kg dermal, long term, systemic effects - 580 mg/kg inhalative, acute, short term, systemic effects - 292 mg/m ³ inhalative, long term, systemic effects - 292 mg/m ³
DNEL - Consumers:	dermal, acute, short term, systemic effects - 580 mg/kg dermal, long term, systemic effects - 580 mg/kg inhalative, acute, short term, systemic effects - 125 mg/m ³ inhalative, long term, systemic effects - 125 mg/m ³ oral, acute, short term - 42 mg/kg oral, long term, repeated exposure - 42 mg/kg

Engineering measures:

Proper Ventillation in place, particualry while handling larger volumes in factory settings and use appropriate protective cloth

Control of exposition limit:

Respiratory protection: Keep ventilated and use mask during handling large volumes

Hand protection: Rubber or plastic gloves

Eye protection: Safety glasses

Skin protection: Use adequate cloth

Personl Protection in Manufacturing/Packing area:

Wear overalls, safety glasses and impermeable gloves. Gnerally product is not dusty, but If dust exists wear appropriate dust mask meeting requirements of AS/NZS 1715 Standards. Always wash hands after handling and before eating, smoking or drinking. Wash contamintaed clothing before storing or reuse

Hygeinic and personal protection practices while handling the product

Keep the material/product away from food and drink, animal feed.

When using, donot eat,drink or smoke

Wash hands or affected area thoroughly prior to eating, drinking or smoking

Avoid contact with skin, eye and inhalation of any dust from the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form:	Granular shape, solid prills
Colour:	white
Odour:	None
PH:	9.1
Melting Point:	133 °C
Boiling Point:	Decomposition beginning at melting point
Vapour Press kPa 025C:	Nil
Specific Gravity:	Not determined
Flashpoint (C):	Non flammable
Flammability Limits:	Non flammable
Solubility in water:	soluble in water (1050 g/L at 20°C)

10. STABILITY AND REACTIVITY

General Information	Product is a non-flammable solid. Corrosive to metals, corrosive effect on non-ferrous metals, magnesium and aluminium
Chemical Stability	Product is stable under normal conditions of use, storage and temperature.
Conditions to Avoid	Avoid uncontrolled heating. Avoid excessive temperatures (70 deg C)
Materials to Avoid	Violently with nitrites. With strong oxidising agents. Incompatible with oxidising agents (e.g. hypochlorites).
Hazardous Decomposition Products	May evolve toxic gases (ammonia, carbon/ nitrogen oxides, hydrocarbons) when heated to decomposition.
Hazardous Polymerisation	Hazardous Polymerisation has not been reported.

11. TOXICOLOGICAL INFORMATION

In general when the product is used and handled safely and as per directions on the label and per safety data sheet instructions, no adverse effects are expected. However in case of mishandling or overexposure to the product, may result in symptoms of accute and Chronic effects.

General Information on Toxicity:

LD50 (ingestion) 8471 mg/kg (rat)
 LD50 (intraperitoneal) > 5000 mg/kg (rat)
 LD50 (intravenous) 4600 mg/kg (mouse)
 LD50 (subcutaneous) 8200 mg/kg (rat)
 LDLo (intraperitoneal) 6608 mg/kg (mouse)
 LDLo (intravenous) 4800 mg/kg (rabbit)
 LDLo (subcutaneous) 3000 mg/kg (rabbit)

ACUTE EFFECTS

Ingestion/Swallowed: Low toxicity. Ingestion may result in gastrointestinal irritation, nausea and vomiting. Ingestion of large quantities may result in dizziness, drowsiness, excessive urine, weakness and confusion.

Eye: Irritant. Contact may result in irritation, lacrimation, pain and redness.

Skin: Prolonged exposure may cause irritation and dry skin, particularly to sensitive skins

Inhaled: Non hazardous, Not generally dusty, but if dusty and overexposed to dusts may be irritant to the respiratory track or mucous membrane.

Chronic Toxicity:

Mutagenicity: No data/information available, but material considered non hazardous

Carcinogenicity This material considered non hazardous

Specific Organ Toxicity No information available but material considered non hazardous.

12. ECOLOGICAL INFORMATION

Ecotoxicity Toxicity to fish: Dose LC50: > 6810 mg/l Species: Leuciscus idus (Golden orfe) Exposure time: 96 h

Toxicity to algae: Species: Scenedesmus quadricauda (Green algae) Exposure time: 192 h Dose: > 10000 mg/l

Aquatic invertebrates: LC50 (48 h) > 10,000 mg/l, Daphnia magna Literature data

Aquatic plants: (8 d) > 10,000 mg/l, Scenedesmus quadricauda Literature data.

Mobility Completely soluble in water.

Environmental Fate Do NOT allow excessive product to reach waterways, drains and sewers.

Bioaccumulation Potential Does not bioaccumulate. This substance is not considered to be persistent, bioaccumulating nor toxic (PBT). This substance is not considered to be very persistent nor very bioaccumulating (vPvB).

Environmental Impact No Data Available



13. DISPOSABLE 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.

14. TRANSPORT INFORMATION

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)

Marine Transport

Not classified as dangerous according to the criteria of International Marine Dangerous Goods (IMDG) for transport by sea.

Air Transport

Not classified as dangerous according to the criteria of International Air Transport Association (IATA) Dangerous Goods regulation for transport by air.

15. REGULATORY INFORMATION

Poisons Schedule (Aust) Not scheduled

16. OTHER INFORMATION

The MSDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

STATEMENT OF DISCLAIMER:

This Material Safety Data Sheet has been developed according to WHS Code of Practice Preparation of Safety Data Sheets for Hazardous Chemicals Guidelines and written in accordance with GHS format. All information is as accurate and up-to-date as possible. Since Manutec Pty Ltd cannot anticipate or control the conditions under which this information may be used, each user should review the information in the specific context of the intended application. Manutec Pty Ltd will not be responsible for damages of any nature resulting from use of or reliance upon this information.

No expressed or implied warranties are given other than those implied mandatorily by Federal, State or Territory Legislation.