

SAFETY DATA SHEET

SECTION 1 - IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: Urea
Other Names: Carbamide
Product Code: BOM5550
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: January 2017 and is valid for 5 years from this date.

SECTION 2 - HAZARDS IDENTIFICATION

Statement of Hazardous Nature

The product as supplied is classified as Non-Hazardous

GHS Signal word: NONE

HAZARD STATEMENT

H332 Harmful if inhaled (Applies to dust)

PREVENTION

P261: Avoid breathing dust.

P264: Wash hands and other exposed body parts thoroughly after handling

P271: Use only outdoors or in well ventilated area.

RESPONSE

P353: Rinse skin with water/shower.

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

P332+P313: If skin irritation occurs: Get medical advice/attention.

P337+P313: If eye irritation persists: Get medical advice/attention.

P341. If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

STORAGE

P403. Store in well ventilated place.

DISPOSAL

P501: Dispose of small or large quantities by recycling or reclaiming processes. If recycling or reclaiming is not possible for small quantities dispose of via local council garbage disposal services, for larger quantities, use a commercial waste disposal service.

SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	CAS No	Proportion of Ingredient
Urea	57-13-6	98.5% min
Various Impurities	-	Remainder

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SECTION 4 - FIRST AID MEASURES

General Information:

Inhalation:

If over exposure to fine dust from product remove source of contamination or move the affected person to a well ventilated area / fresh air. Ensure airways are clear. If breathing is difficult have a qualified person to give oxygen through a face mask. If irritation persists seek medical attention.

Skin Contact:

Gently flush affected areas with water. Seek medical attention for persistent redness, irritation or burning of the skin.

Eye Contact:

Flush gently with running water for at least 15 minutes lifting lower and upper eyelids occasionally. If symptoms such as irritation or redness persist, seek medical attention.

Ingestion:

Rinse mouth thoroughly with water, and give water to drink. **DO NOT** induce vomiting. If symptoms persist Seek medical attention.

Advice to Doctor: Treat symptomatically.

SECTION 5 - FIRE FIGHTING MEASURES

Flammability: Non Flammable

Extinguishing Media / Agents: Not applicable

Specific hazards arising from

the substance or Mixture: If heated to the point of decomposition oxides of nitrogen may be released.

Advice for fire fighters: None.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Accidental release measures

Environmental precautions: Not applicable

Methods and materials

for containment and cleaning up: Avoid creating fine dust particles when cleaning up spillages, wet product or use vacuum to remove spills.

SECTION 7 - HANDLING AND STORAGE

Precautions for Safe Handling: Keep away from alkalis, hypochlorites, oxidizing agents, ammonium nitrate, permanganates, metallic powders and strong acids when transporting.

Conditions for Safe Storage: Store in cool, clean dry and well ventilated area. Avoid contact with moisture, as it will cause product handling issues.
Store away from alkalis, hypochlorites, oxidizing agents, ammonium nitrate, permanganates, metallic powders and strong acids.

SECTION 8 - EXPOSURE CONTROLS AND PERSONAL PROTECTION

The following applies to **dust** from this product

Exposure Limits Exposure to dust from this product should be kept as low as practicable and below the following NES: Total inhalable dust (of any type, or particle size): 10mg/m³ TWA.

Engineering Controls: Use of product should be in a well ventilated area.
All work should be carried out in such a way as to minimise dust generation, and exposure to dust.
Mechanical ventilation: Dust extraction and collection may be used, if necessary, to control airborne dust levels.
Work areas should be cleaned regularly.

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Personal Protective Equipment:

- Respiratory:** Respiratory protection depends primarily on the concentration of the respirable **dust** in the air, and the frequency and length of exposure time. A suitable P1 or P2 particulate respirator chosen and used in accordance with AS/NZS 175 and AS/NZSD 1716 may be sufficient for many situations.
- Other:** Rubber / PVC gloves, safety glasses are optional protective equipment dependent on frequency and length of exposure time to product.

Hygiene Controls:

After use and before eating, drinking, smoking or using the toilet wash hands thoroughly with soap and water.
After each days use, wash contaminated clothing.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

- Appearance :** White granules, with saline taste.
Odour: slight ammoniacal odour
pH: 7.0 - 8.0
Vapour Pressure: Does not exert significant vapour pressure.
Vapour Density: Not determined.
Boiling Point/Range: Decomposes above 135°C before boiling.
Freezing Point: 133°C.
Solubility: Soluble in water (119.3g/100mL at 25°C).
Bulk Density: Not available.
Flammability: Not flammable.
Flash point: Not applicable.
Danger of Explosion: Not applicable.
Auto-ignition temp: Not applicable.

SECTION 10 - STABILITY AND REACTIVITY

- Chemical Stability:** Product is stable under normal conditions.
Conditions to Avoid: Dust generation
Incompatible materials: Alkalis, hypochlorites, oxidizing agents, nitrites, permanganates, metallic powders and strong acids.
Hazardous reactions: Reactive with alkalis, hypochlorites, oxidizing agents, nitrites, permanganates, metallic powders and strong acids.
Mildly corrosive to aluminium, zinc, copper, nickel, cobalt, iron and mild steel.
Hazardous Decomposition Products: May react explosively on contact with halogens such as chlorine (swimming pool chlorine – calcium hypochlorite and sodium hypochlorite mixture).
Ammonia may be released when urea and strong alkalis are mixed together.

SECTION 11 - TOXICOLOGICAL INFORMATION

Health Effects:

- Acute (Short Term)** Low toxicity. Use safe work practices to avoid eye or skin contact and dust
- 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 diarrhoea.
- Inhalation:** High dust concentration of air-borne material may cause irritation to the nose and upper respiratory tract, and symptoms may include coughing and sore throat.
- Chronic (Long Term)** There are no known effects from chronic exposure to Urea.

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Toxicity Data

Urea (57-13-6): LDLo (intravenous): 4800mg/kg (rabbit)
LDLo (intraperitoneal): 6608mg/kg (mouse)
LD50 (intraperitoneal): >5000mg/kg (rat)
LDLo (subcutaneous): 3000mg/kg (rabbit)
LD50 (ingestion): 8471mg/kg (rat)
LD50 (Intravenous): 4600mg/kg (mouse)
LD50 (subcutaneous): 8200mg/kg (rat)

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity: Urea poses no ecology risk. The product is non-toxic to aquatic and terrestrial organisms and is not biodegradable.

Persistence and Degradability: Product is persistent and is non-degradable.

Mobility: Low mobility would be expected in a landfill situation.

SECTION 13 - DISPOSAL CONSIDERATIONS

Disposal:

Urea can be treated as a common waste for disposal or dumped into landfill site in accordance with local authority guidelines.

Measures should be taken to prevent dust generation during disposal and exposure and personal precautions should be observed (see above).

SECTION 14 - TRANSPORT INFORMATION

UN Number: None allocated
UN Proper Shipping Name: None allocated
Transport Hazard Class: None allocated
Packing Group: None allocated
Environmental Hazards: Not applicable
Special precautions for user: See above
Hazchem Code: None allocated

SECTION 15 - REGULATORY INFORMATION

Safety, health and environmental regulations specific for the product: None.

Poisons Schedule Number: Not applicable

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SECTION 16 - OTHER INFORMATION

The information and recommendations in this safety data sheet are, to the best of our knowledge accurate as of the date of issue. Nothing herein shall be deemed to create warranty, expressed or implied, and shall not establish a legally valid contractual relationship. It is the responsibility of the user to determine applicability of this information and the suitability of the material or product for any particular purpose and how it will be handled and used in the workplace, including in conjunction with other products.

Abbreviations and acronyms

ADG Code	Australian Code for the Transport of Dangerous Goods by Road and Rail, 7th Edition
AICS	Australian Inventory of Chemical Substances
CAS Number	Chemical Abstracts Service Registry Number
Hazchem Code	Emergency action code of numbers and letters that provide information to emergency services especially firefighters
IARC	International Agency for Research on Cancer
LDLo	The lowest dose in an animal study in which lethality occurred.
LD50	Lethal dose 50. The single dose of a substance that causes the death of 50% of animal population from exposure to the substance by any route other than inhalation
mg/m³	Milligram per cubic metre
mg/kg	Milligram per kilogram
SUSMP	Standard for the Uniform Scheduling of Medicines & Poisons
SWA	Safe Work Australia, formerly ASCC and NOHSC
UN Number	United Nations Number