

Safety Data Sheet

Urea

UPDATED: 21/01/2025

1. IDENTIFICATION AND SUPPLIER

1.1) Product Identifier

Product Name: Urea
Synonym(s): Carbamide, Carbonyldiamide

1.2) Uses

Intended Use: For Fertiliser

1.3) Supplier Details

Supplier Name: Dickie Direct Ltd
Supplier Address: 25 Railway Rd, Whakatu, Hastings
4172
Supplier Contact: 0800 4 DICKIE (4 34254)
Supplier Website: www.dickiedirect.co.nz

1.4) Emergency Contact Numbers

National Poisons Information Centre: 0800 POISON (764 766)
Emergency (In Storage): 0800 CHEMCALL (243 622)
Emergency (In Transit): 111 (Advise of Fire, Ambulance or Police)

1 HAZARDS IDENTIFICATION

2.1) Classification of Substance

Not considered a Hazardous Substance according to the criteria of the New Zealand Hazardous Substances New Organisms legislation. Not regulated for transport of Dangerous Goods.

2.2) Hazard Classification

- 6.1D Substances that are acutely toxic.
 - 9.1D Substances that are slightly harmful to the aquatic environment or are otherwise designed for biocidal action .
 - 9.3C Substances that are harmful to terrestrial vertebrates.
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3. COMPOSITION INFORMATION

3.1) Substances and Mixtures

Ingredient:	Urea
CAS NO:	57-13-6
Content	100%

4. FIRST AID MEASURES

Eyes:	If in eyes, hold eyelids apart and flush continuously with running water. Continue flushing until advised to stop by the National Poisons Information Centre, a doctor, or for at least 15 minutes.
Inhalation:	If inhaled, remove from contaminated area. Apply artificial respiration if not breathing.
Skin:	If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. Continue flushing with water until advised to stop by the National Poisons Information Centre or a doctor.
Ingestion:	For advice, contact the National Poison Information Centre 0800 764 766 or a doctor (at once). If swallowed, do not induce vomiting. Seek medical attention if symptoms persist.
First aid facilities:	Drinking water and eye-wash bottle should be available.

5. FIRE FIGHTING MEASURES

5.1 Extinguishing Media

Use an extinguishing agent suitable for the surrounding fire.

5.2 Special hazards arising from the substance or mixture

Non flammable. May evolve toxic gases (sulphur/ nitrogen oxides, ammonia) when heated to decomposition. Contact with chlorinating agents can form explosive nitrogen trichloride when heated to decomposition.

5.3 Advice for Firefighters

No fire or explosion hazard exists. Toxic gases may be evolved in a fire situation. Ammonia, Carbon Oxide, Nitrogen Oxide.

5.4 Hazchem Code

None allocated

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Wear Personal Protective Equipment (PPE) as detailed in section 8 of the SDS.
Ventilate area where possible.

6.2 Environmental precautions

Prevent product from entering drains and waterways.

6.3 Methods of cleaning

Contain spillage, then collect and place in suitable containers for disposal. Avoid generating dust.

6.4 Reference to other Sections

See Sections 8 and 13 for exposure controls and disposal.

7. HANDLING AND STORAGE

7.1 Precautions for safe 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.

7.2 Conditions for safe storage, including any incompatibilities

Store tightly sealed in a cool, dry, well ventilated area, removed from incompatible substances and foodstuffs. Ensure containers are adequately labelled, protected from physical damage and sealed when not in use. Check regularly for leaks or spills.

7.3 Specific end use(s)

Intended for use as a fertiliser.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Exposure standards

No exposure standards have been entered for this product.

Biological limits

No biological limit values have been entered for this product.

8.2 Exposure controls

Engineering controls

Avoid inhalation. Use in well ventilated areas. Where an inhalation risk exists, mechanical extraction ventilation is recommended. Maintain dust levels below the recommended exposure standard.

PPE
Eye / Face
Wear dust-proof goggles.
Hands
Wear PVC or rubber gloves.
Body
When using large quantities or where heavy contamination is likely, wear coveralls.
Respiratory
At high dust levels, wear a Class P1 (Particulate) respirator.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance:	WHITE CRYSTALLINE SOLID ROUND GRANULE
Odour:	SLIGHT AMMONIA SMELL
Flammability:	NON FLAMMABLE
Flash point	NOT RELEVANT
Boiling point	NOT RELEVANT
Melting point	133°C
Evaporation rate	NOT RELEVANT
pH	(100g.L-1 in water, 20oC) ~9
Vapour density	NOT AVAILABLE
Specific gravity	1.34G/CM3
Vapour pressure	NOT RELEVANT
Upper explosion limit	NOT RELEVANT
Lower explosion limit	NOT RELEVANT
Partition coefficient	NOT AVAILABLE
Autoignition temperature	NOT AVAILABLE
Decomposition temperature	NOT AVAILABLE
Viscosity	NOT AVAILABLE
Explosive properties	NOT AVAILABLE
Oxidising properties	NOT AVAILABLE
Odour threshold	NOT AVAILABLE

9.2 Other information

Density	0.74 tonne/m ³ (Bulk)
% Volatiles	NOT RELEVANT

10. STABILITY AND REACTIVITY

10.1) Chemical stability

Stable under recommended conditions of storage.

10.2) Possibility of hazardous reactions

Polymerization is not expected to occur.

10.3) Conditions to avoid

Avoid heat, sparks, open flames and other ignition sources.

10.4) Incompatible materials

Hypochlorites (e.g. bleach), nitrates, nitrites, strong oxidisers.

10.5) Hazardous decomposition products

Ammonia, carbon oxides, nitrogen oxides. Produces biuret on heating

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Health hazard summary

May be harmful - irritant. This product may present a hazard with direct eye contact, prolonged skin contact or with dust inhalation at high levels. Chronic effects are not anticipated.

Eye

Low to moderate irritant. Contact may result in mild irritation, lacrimation and redness.

Inhalation

Low irritant. Over exposure may result in irritation of the nose and throat, with coughing.

Skin

Low irritant. Prolonged or repeated contact may result in mild irritation, rash and dermatitis. Dermal LD50 (rat) is > 2000 mg/kg.

Ingestion

May be harmful. Ingestion may result in gastrointestinal irritation, nausea, vomiting, abdominal pain and diarrhoea. Oral LD50 (rat) is 3000 mg/kg.

12. ECOLOGICAL INFORMATION

12.1) Hazard Classifications

9.1D Substances that are slightly harmful to the aquatic environment or are otherwise designed for biocidal action

9.3C Substances that are harmful to terrestrial vertebrates

13. DISPOSAL INFORMATION

13.1 Waste treatment methods

Product Disposal

Reuse or recycle where possible or apply excess product at recommended rates to appropriate land.

Packaging (Bulk Bag) Disposal

Ensuring bulk bags are completely empty and recycle where possible.

14. TRANSPORT INFORMATION

UN Number:	None Allocated
Proper Shipping Name:	None Allocated
Hazard Class:	None Allocated
Packing Group:	None Allocated

15. REGULATORY INFORMATION

15.1) Regulatory Publications Referencing Ammonium Sulphate

New Zealand Inventory of Chemicals

New Zealand HSNO Act

16. OTHER INFORMATION

Additional information

RESPIRATORS: In general the use of respirators should be limited and engineering controls employed to avoid exposure. If respiratory equipment must be worn ensure correct respirator selection and training is undertaken.

Remember that some respirators may be extremely uncomfortable when used for long periods. The use of air powered or air supplied respirators should be considered where prolonged or repeated use is necessary.

EXPOSURE STANDARD: Exposure standards are established on the premise of an 8 hour work period of normal intensity, under normal climatic conditions and where a 16 hour break between shifts exists to enable the body to eliminate absorbed contaminants. In the following circumstances, exposure standards must be reduced: Strenuous work conditions; hot, humid climates; high altitude conditions; extended shifts (which increase the exposure period and shorten the period of recuperation).

PERSONAL PROTECTIVE EQUIPMENT GUIDELINES: The recommendation for protective equipment contained within this report is provided as a guide only.

Factors such as method of application, working environment, quantity used, product concentration and the availability of engineering controls should be considered before final selection of personal protective equipment is made.

HEALTH EFFECTS FROM EXPOSURE: It should be noted that the effects from exposure to this product will depend on several factors including: frequency and duration of use; quantity used; effectiveness of control measures; protective equipment used and method of application. Given that it is impractical to prepare a ChemAlert report which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate.