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## 1. Identification

**Product Name:** Urea

**Other Name(s):** Carbamide, Carbonyl diamide, Carbonyldiamine

**Chemical formula:** (NH<sub>2</sub>)<sub>2</sub>CO

**Proper Shipping Name:** None allocated

**UN Number:** None allocated

**Recommended Use:** As a fertiliser ingredient.

**Manufacturer:**

Ravensdown Fertiliser Co-operative Ltd

32 Oxford Terrace

PO Box 1049

Christchurch

Customer Centre - ph. 0800 100 123

Email info@ravensdown.co.nz

**24 hrs Poisons Advice:** National Poisons Centre

ph. 0800 POISON / 0800 764 766

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## 2. Hazard Identification

**Statement of Hazardous Nature:** Classified as hazardous according to criteria in the HS (Minimum Degrees of Hazard) Regulations 2001.

**Hazard Classification:** 6.1D, 6.3B, 6.4A, 9.3C



WARNING

**Hazard Statements**

Harmful if swallowed.

Harmful if inhaled.

Causes serious eye irritation.

Harmful to terrestrial vertebrates.

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## 3. Composition & Information on Ingredients

Ingredient	CAS Number	Proportion
Urea	57-13-6	99-100%

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## 4. First Aid Measures

**Response Statements**

IF SWALLOWED : Rinse mouth, do NOT induce vomiting.

IF ON SKIN : Wash with plenty of soap and water.

IF INHALED : Remove to fresh air and keep at rest in a position comfortable for breathing.

IF IN EYES : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing.

Call a POISON CENTRE or doctor/physician if you feel unwell.

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Never give fluids to an unconscious person.

**Poisons & Hazardous Chemicals National Information Centre**

phone 0800 POISON / 0800 764 766 (24-hr)

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## 5. Fire Fighting Measures

Non-flammable

**Extinguishing media:** CO<sub>2</sub>, foam, dry powder, water

**Combustion products:** Ammonia, carbon oxides, nitrogen oxides

**Flash point:** Not applicable

**Flammability limits:** Not applicable

**Auto-ignition temperature:** Not applicable

**HAZCHEM Code:** None allocated

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## 6. Spillage, Accidental Release Measures

Protect yourself and others from injury. Wear appropriate protective equipment (see section 8).

Collect and place in clean sealable containers. Avoid generating dusts.

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## 7. Handling & Storage

### Precautionary Statements

Keep out of reach of children.  
Do not breathe dust.  
Wash hands thoroughly after handling.  
Do not eat drink or smoke when using this product.  
Avoid unintended release to the environment.

### Safe Handling

Avoid generating dusts. Use only outdoors or in a well-ventilated area.

### Storage

Store in sealed containers in cool, dry, well ventilated area.

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## 8. Exposure Controls & Personal Protection

### Exposure Standards

#### **Workplace Exposure Standards (WES):**

*Particulates not otherwise classified*

Inspirable dust 10mg.m<sup>-3</sup>

Respirable dust 3mg.m<sup>-3</sup>

*Ammonia* 25ppm (TWA)

35ppm (STEL)

**Tolerable Exposure Limit (TEL):** Not assigned

### PPE

**Respiratory:** If dusts present wear dust mask.

**Eyes/Face:** Safety glasses. If dusts present wear goggles.

**Skin:** Overalls, gloves.

Eye wash facilities should be available.

Wash hands after working with substance.

### Engineering Controls

**Ventilation:** Use in well ventilated area. If dusts are generated use local extraction to control.

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## 9. Physical & Chemical Properties

**Appearance:** White granules

**Odour:** slight ammonia smell

**pH:** (100g.L<sup>-1</sup> in water, 20°C) ~9

**Vapour pressure:** <0.1 hPa

**Vapour density:** Not available

**Boiling point:** (decomposes)

**Melting point:** 133°C

**Solubility (water):** Very soluble

**Specific gravity:** 1.34 g.cm<sup>-3</sup>

**Bulk density:** 0.8 kg.m<sup>-3</sup>

**Flash point:** Not applicable

**Auto-ignition temperature:** Not applicable

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## 10. Stability & Reactivity

**Stability:** Stable under normal conditions.

**Conditions to avoid:** Strong heat.

**Materials to avoid:** Hypochlorites (e.g. bleach), nitrates, nitrites, strong oxidisers.

**Hazardous decomposition products:** Ammonia, carbon oxides, nitrogen oxides. Produces biuret on heating.

**Hazardous polymerisation:** Will not occur

**Hygroscopic:** No

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## 11. Toxicological Information

### Health Effects / Symptoms of Exposure

No adverse health effects expected under normal conditions.

**Inhalation:** Slight irritant. Elevated exposure may result in mucous membrane irritation (nose & throat).

**Skin:** Irritant. Prolonged contact may result in irritation, itching and possible skin rash.

**Eyes:** Irritant. May cause lachrymation, irritation, pain & redness.

**Ingestion:** Has diuretic effect. Ingestion of large quantities may lead to nausea and vomiting.

### Toxicological Data

LD<sub>50</sub> (oral, rat) 8471 mg.kg<sup>-1</sup> (RTECS)

LD<sub>50</sub> (dermal, rat) 8200 mg.kg<sup>-1</sup> (IUCLID)

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## 12. Ecological Information

**Environmental Exposure Limit (EEL):** Not assigned

Avoid washing excessive amounts into streams and waterways.

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## 13. Disposal Considerations

Observe any local authority restrictions that may apply. Collection into sealable containers and dispose of in an approved land fill. If practicable apply excess fertiliser at recommended rates to appropriate land.

**Containers:** Rinse containers thoroughly prior to re-use. Otherwise render unusable, and dispose of as waste.

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## 14. Transport Information

No special transport requirements necessary

**Proper Shipping Name:** None allocated

**UN Number:** None allocated

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## 15. Regulatory Information

**Exposure limits:** (see sections 8, 12)

**ERMA Approval :** HSR002808

### HSNO Controls

Refer '*ERMA User Guide to Controls*' for full details.

**Location Certification:** Not required

**Tracking:** Not required

**Approved Handlers:** Not required.

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## 16. Other Information

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### **Revision Information**

This revision dated 10 May 2007 – addition of HSNO classifications, hazard and precautionary statements. General review in conjunction with *HSNO Approved Code of Practice : Preparation of Safety Data Sheets*.

Previous revision dated 25 July 2005 (re-write).