


Urea

Section 1: SUBSTANCE IDENTIFICATION AND SUPPLIER

Product Name:	Urea
Other Names:	Carbamide, Carbonyldiamide
Product Code:	4300000
Recommended Use:	Fertiliser
Restrictions of Use:	Refer to Section 15
Company Identification:	Ravensdown Limited
Address:	292 Main South Road, Hornby, Christchurch, 8042 PO Box 1049, Christchurch 8011
Customer Centre:	0800 100 123
National Poisons Information Centre:	0800 POISON (0800 764 766)
Emergency Phone Number:	0800 CHEMCALL (0800 243 622) (24hr) (Emergencies Only)
Transport Emergency Phone Number:	111 - tell operator what service is needed: Fire, Ambulance or Police
Date of SDS Preparation	15 December 2022

Section 2: HAZARD IDENTIFICATION

This substance is hazardous according to the EPA Hazardous Substances (Classification) Notice 2020

EPA Approval No:	Fertilisers (subsidiary) – HSR002571
Pictograms:	
Signal Word:	Warning

GHS Classification and Category	Hazard Code	Hazard Statement
Eye irritation Cat. 2	H319	Causes serious eye irritation.

Prevention Code	Prevention Statement
P103	Read label before use.
P264	Wash hands thoroughly after handling.
P280	Wear protective clothing as detailed in Section 8.

Response Code	Response Statement
P305 + P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313	If eye irritation persists: Get medical advice/attention.

Storage Code	Storage Statement
None allocated	

Disposal Code	Disposal Statement
P501	Dispose of according to Local Regulations or Authorities

Section 3: COMPOSITION INFORMATION

INGREDIENT	CAS No.	CONTENT %
Urea	57-13-6	99-100

Section 4: FIRST AID MEASURES

Routes of Exposure:	
If in eyes:	Rinse cautiously with water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice.
If on skin:	Wash skin with plenty of soap and water. If skin irritation occurs: Get medical advice/attention.
If ingested:	Rinse mouth. Never give anything to the mouth of an unconscious person. If vomiting occurs, place victim face downwards, with the head turned to the side and lower than the hips to prevent vomit entering the lungs. Call a POISON CENTER or doctor/physician if you feel unwell.
If inhaled:	Remove person to fresh air. Remove contaminated clothing and loosen remaining clothing. Allow person to assume most comfortable position and keep warm. Keep at rest until fully recovered. Get medical advice if breathing becomes difficult.
Most important symptoms and effects, both acute and delayed	
Symptoms:	Refer to Section 11 for full details.
Eyes:	Causes serious eye irritation. May cause lachrymation, irritation, pain & redness.
Skin:	Not applicable.
Ingested:	Not applicable.
Inhaled:	Not applicable.
Chronic:	Not applicable.
Advice to Doctor:	Treat symptomatically.

Section 5: FIRE FIGHTING MEASURES

Hazard Type	Not flammable or combustible.
Hazards from combustion products	Ammonia, carbon oxides, nitrogen oxides.
Suitable Extinguishing media	CO2, foam, dry powder, water – based on surrounding materials.
Precautions for firefighters and special protective clothing	Breathing apparatus, goggles and protective gloves.
HAZCHEM CODE	None allocated

Section 6: ACCIDENTIAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:
Wear appropriate protective clothing as detailed in Section 8. Exclude non-essential people from the area. If possible, avoid contact with eyes and skin.
Environmental precautions:
Avoid from entering drains, waterways or sewers.
Methods and material for containment and cleaning up:
Contain spill and sweep up. Collect and place in sealable containers. Avoid generating dust. Reuse or recycle where possible. Dispose as per Section 13.

Section 7: HANDLING AND STORAGE

Handling:	Read label before use. Wash hands thoroughly after handling. Wear protective clothing as detailed in Section 8. Avoid generating dusts, do not breathe dusts. Avoid contact with skin and eyes. Do not eat drink or smoke when using this product. Avoid unintended release to the environment
Storage:	Store away from incompatible materials listed in Section 10. Store in a cool, dry area, well ventilated area.

Section 8: EXPOSURE CONTROL/PERSONAL PROTECTION

WORKPLACE EXPOSURE STANDARDS (provided for guidance only)

Substance	TWA		STEL	
	ppm	mg/m ³	ppm	mg/m ³
Inspirable dust	-	10	-	-
Respirable dust	-	3	-	-

Workplace Exposure Standard – Time Weighted Average (WES-TWA). The time-weighted average exposure standard designed to protect the worker from the effects of long-term exposure. Workplace Exposure Standard – Short-Term Exposure Limit (WESSTEL). The 15-minute average exposure standard. Applies to any 15- Minute period in the working day and is designed to protect the worker against adverse effects of irritation, chronic or irreversible tissue change, or narcosis that may increase the likelihood of accidents. The WES-STEL is not an alternative to the WES-TWA; both the short-term and time-weighted average exposures apply. Workplace Exposure Standards and Biological Exposure Indices April 2022 13TH EDITION.

Engineering Controls:	Handle in well ventilated area. Minimise generation of airborne dust
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Personal Protection Equipment:



Eyes:	Wear close fitting safety glasses or goggles to prevent dust getting in eyes. Ensure eye wash facilities should be available.
Skin/Hands:	Wear protective clothing and gloves where there is a risk of moderate to high skin contamination from product.
Respiratory:	Wear particulate respirator where there is a risk of breathing in moderate to high levels of airborne dust.
General:	Do not eat, drink or smoke when handling this product. Remove contaminated protective clothing and wash hands and face before meals and after work.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Granule
Colour	White
Odour	Slight ammonia smell
Odour Threshold	Not available
pH	(100g.L-1 in water, 20oC) ~9
Boiling Point	(decomposes)
Melting Point	133°C
Freezing Point	Not available
Flash Point	Not available
Flammability	Not available
Upper and Lower Explosive Limits	Not available

Vapour Pressure	<0.1 hPa
Vapour Density	Not available
Specific Gravity	1.34g/cm
Bulk Density	740 kg/m ³
Water Solubility	Very soluble
Partition Coefficient:	Not available
Auto-ignition Temperature	Not available
Decomposition Temperature	Not available
Kinematic Viscosity	Not available
Granulometrics (mm)	Not available

Section 10: STABILITY AND REACTIVITY

Stability of Substance	Stable under normal conditions.
Possibility of hazardous reactions	Not data available.
Conditions to Avoid	Strong heat.
Incompatible Materials	Hypochlorites (e.g. bleach), nitrates, nitrites, strong oxidisers.
Hazardous Decomposition Products	Ammonia, carbon oxides, nitrogen oxides. Produces biuret on heating.

Section 11: TOXICOLOGICAL INFORMATION

Acute Effects:

Swallowed	Not triggered. Has diuretic effect. Ingestion of large quantities may lead to nausea and vomiting. LD50 (oral, rat) 8471 mg/kg
Dermal	Not applicable. LD50 (dermal, rat) 8200 mg/kg
Inhalation	Not triggered. Slight irritant. Elevated exposure may result in mucous membrane irritation (nose & throat).
Eye	Causes serious eye irritation. May cause lachrymation, irritation, pain & redness.
Skin	Not triggered. Prolonged may result in irritation itching and possible skin rash.

Chronic Effects:

Carcinogenicity	Not applicable
Reproductive Toxicity	Not applicable
Germ Cell Mutagenicity	Not applicable
Aspiration	Not applicable
STOT/SE	Not applicable
STOT/RE	Not applicable

Section 12: ECOLOGICAL INFORMATION

This product is not hazardous to the environment.

Persistence and degradability	No data available.
Bioaccumulation	No data available
Mobility in Soil	No data available.
Other adverse effects	No data available

Avoid unintended release into streams and waterways.

Section 13: DISPOSAL INFORMATION

Disposal Method:	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. Rinse containers thoroughly prior to reuse.
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	Otherwise render unusable and dispose of as waste.
Precautions or methods to avoid:	None known.

Section 14: TRANSPORT INFORMATION

This product is NOT classified as a Dangerous Good for transport in NZ ; NZS 5433:2020

Section 15: REGULATORY INFORMATION

This substance is classified hazardous according to the EPA Hazardous Substances (Classification) Notice 2020

EPA Approval Code:	Fertilisers (subsidiary) – HSR002571
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HSW (HS) Regulations 2017	Trigger Quantity
Signage Trigger Quantities (Schedule 3)	Not required
Emergency Response Plan (Schedule 5)	Not required
Secondary Containment (Schedule 5)	Not required
Tracking (Schedule 26)	Not required
Certified Handlers	Not required
Location Certificate	Not required
Restrictions of use	None known.

Section 16: OTHER INFORMATION

Glossary

Cat	Category
EC ₅₀	Median effective concentration.
EEL	Environmental Exposure Limit.
EPA	Environmental Protection Authority
HSNO	Hazardous Substances and New Organisms.
HSW	Health and Safety at Work.
LC ₅₀	Lethal concentration that will kill 50% of the test organisms inhaling or ingesting it.
LD ₅₀	Lethal dose to kill 50% of test animals/organisms.
LEL	Lower explosive level.
OSHA	American Occupational Safety and Health Administration.
TEL	Tolerable Exposure Limit.
TLV	Threshold Limit Value-an exposure limit set by responsible authority.
UEL	Upper Explosive Level
WES	Workplace Exposure Limit

References:

1. EPA Hazardous Substances (Safety Data Sheets) Notice 2017
2. Workplace Exposure Standards and Biological Exposure Indices APRIL 2022 edition.
3. Assigning a hazardous substance to a HSNO Approval (Aug 2013).
4. Transport of Dangerous goods on land NZS 5433:2020
5. HSW (Hazardous Substances) Regulations 2017

Disclaimer

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Please contact Ravensdown, if further information is required.

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