



# Safety Data Sheet

## Urea

UPDATED: 23 January 2020

### Section 1: SUBSTANCE IDENTIFICATION & SUPPLIER

<b>Product Name:</b>	<b>Urea</b>
<b>Other Names:</b>	Carbamide, Carbonyldiamide
<b>Product Code:</b>	4300000
<b>Chemical Formula:</b>	CO(NH <sub>2</sub> ) <sub>2</sub>
<b>Recommended Use:</b>	Fertiliser
<b>Company Identification:</b>	Morton Smith - Dawe Limited
<b>Address:</b>	396 Wigram Road, Halswell, Christchurch PO Box 37 - 139 Halswell
<b>Customer Centre:</b>	03 322 8117
<b>National Poisons Information Centre:</b>	0800 POISON ( 0800 764 766)
<b>Emergency Phone Number:</b>	0800 CHEMCALL (0800 243 622) (24hr) (Emergencies Only)
<b>Transport Emergency Phone Number:</b>	111 - Tell operator what service is needed: Fire, Ambulance or Police

### Section 2: HAZARD IDENTIFICATION

This substance is classified as Hazardous according to criteria in HS (Minimum Degrees of Hazard) Regulations 2001:

<b>Pictograms</b>	
<b>Signal Word:</b>	<b>WARNING</b> <b>KEEP OUT OF REACH OF CHILDREN</b>

<b>Hazard Classifications:</b>	6.1D, 6.3B, 6.4A, 9.3C
<b>Priority Identifiers:</b>	WARNING KEEP OUT OF REACH OF CHILDREN
<b>Secondary Identifiers:</b>	6.1D = Harmful if swallowed 6.3B = Causes mild skin irritation 6.4A = Causes eye irritation 9.3C = Harmful to terrestrial vertebrates

### Section 3: COMPOSITION IDENTIFICATION

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

## Section 4: FIRST AID MEASURES

<b>Routes of Exposure:</b>	
<b>If in eyes:</b>	Flush with plenty of water for several minutes, holding eyelids open if necessary. Remove contact lenses if present and easy to do. Seek medical advice
<b>If on skin</b>	Wash affected area thoroughly with soap and water
<b>If Ingested:</b>	Never give anything by mouth to an unconscious person. If swallowed rinse mouth, do NOT induce vomiting. Seek medical advice
<b>If Inhaled:</b>	Remove patient to fresh air and keep at rest in position comfortable for breathing. Seek medical assistance if effects persist.
<b>First Aid Measures:</b>	Consult the National Poisons Centre on 0800 POISON (0800 764 766) or a doctor immediately in every case of suspected poisoning.
<b>Advice to Doctor:</b>	Treat symptomatically.

## Section 5: FIRE FIGHTING MEASURES

<b>Hazard Type</b>	N/A (Non-flammable)
<b>Hazardous Combustion Products:</b>	Ammonia, carbon oxides, nitrogen oxides
<b>Extinguishing Media:</b>	CO2, foam, dry powder, water – based on surrounding materials
<b>Protective Equipment:</b>	Breathing apparatus, goggles and protective gloves
<b>HAZCHEM Code:</b>	None allocated

## Section 6: ACCIDENTAL RELEASE MEASURES


<b>Personal precautions, protective equipment and emergency procedures:</b>
Wear appropriate protective clothing as detailed in Section 8.
<b>Environmental precautions:</b>
Avoid unintended release of excessive amounts into waterways or sewers.
<b>Methods and material for containment and cleaning up:</b>
Wear appropriate protective clothing. Contain spill and sweep up. Collect and place in sealable containers. Avoid generating dust. Reuse or recycle where possible.

## Section 7: HANDLING AND STORAGE

<b>Handling:</b>	Avoid generating dusts, do not breathe dusts.  <b>Approved Handler:</b> Not required <b>Tracking:</b> Not required <b>Record Keeping:</b> Not required
<b>Storage:</b>	Store in cool, dry, well-ventilated area.
<b>Precautionary Statements:</b>	Keep out of reach of children. Wash hands thoroughly after handling. Do not eat drink or smoke when using this product. Avoid unintended release to the environment

## Section 8: EXPOSURE CONTROL / PERSONAL PROTECTION

### WORKPLACE EXPOSURE STANDARDS (provided for guidance only)

<b>Exposure Limits:</b>	<b>Workplace Exposure Standards (WES):</b> Particulates not otherwise classified: Inspirable dust: 10mg.m <sup>-3</sup> Respirable dust: 3mg.m <sup>-3</sup>  <b>Ammonia</b> 25ppm (TWA) 35 ppm (STEL)  <b>Total Exposure Limit (TEL):</b> Not assigned
<b>Personal Protection Equipment:</b>  Wear particulate respirator where there is a risk of breathing in moderate to high levels of airborne dust. Eye wash facilities should be available.	
<b>Engineering Controls:</b>	Handle in well ventilated area. Minimise generation of airborne dust
<b>Hygiene Precautions:</b>	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 & CHEMICAL PROPERTIES

<b>Appearance:</b>	White
<b>Odour:</b>	Slight ammonia smell
<b>Odour Threshold:</b>	Not Available
<b>Format:</b>	Granule
<b>Specific Gravity:</b>	1.34g/cm
<b>Solubility in Water:</b>	Very soluble
<b>Flash Point:</b>	Not Available
<b>Bulk Density:</b>	740 kg/m <sup>3</sup>
<b>pH:</b>	(100g.L <sup>-1</sup> in water, 20°C) ~9
<b>Melting Point:</b>	133°C
<b>Boiling Point:</b>	(Decomposes)
<b>Vapour Pressure:</b>	<0.1 hPa

## Section 10: STABILITY & REACTIVITY

<b>Stability of Substance:</b>	This product is stable under normal conditions.
<b>Possibility of hazardous reactions:</b>	Will not occur.
<b>Hazardous Decomposition Products:</b>	Ammonia, carbon oxides, nitrogen oxides. Produces biuret on heating.
<b>Conditions to Avoid:</b>	Strong heat.
<b>Materials to Avoid:</b>	Hypochlorites (e.g. bleach), nitrates, nitrites, strong oxidisers.

## Section 11: TOXICOLOGICAL INFORMATION

<b>Hazard Classifications:</b>	6.1D, 6.3B, 6.4A
<b>Ingestion:</b>	Has diuretic effect. Ingestion of large quantities may lead to nausea and vomiting.
<b>Inhalation:</b>	Slight irritant. Elevated exposure may result in mucous membrane irritation (nose & throat).
<b>Skin:</b>	Irritant. Prolonged may result in irritation itching and possible skin rash.
<b>Eye:</b>	Irritant. May cause lachrymation, irritation, pain & redness.
<b>Chronic Effects:</b>	Not anticipated
<b>Other Information:</b>	No adverse health effects expected under normal conditions.
<b>Toxicity Data:</b>	LD50 (oral, rat) 8471 mg/kg LD50 (dermal, rat) 8200 mg/kg

## Section 12: ECOLOGICAL INFORMATION

<b>Hazard Classifications:</b>	9.3C
<b>Ecotoxicity:</b>	Avoid unintended release into streams and waterways.
<b>Environmental Exposure Limit (EEL):</b>	Not assigned.

## Section 13: DISPOSAL INFORMATION

<b>Disposal Method:</b>	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.
<b>Container Disposal:</b>	Rinse containers thoroughly prior to reuse. Otherwise render unusable and dispose of as waste.

## Section 14: TRANSPORT INFORMATION

<b>UN Number:</b>	None allocated.
<b>Proper Shipping Name:</b>	Urea
<b>DG Class:</b>	None allocated.
<b>Other Information:</b>	No special transport requirements necessary.

## Section 15: REGULATORY INFORMATION

<b>EPA Approval Code:</b>	Approved pursuant to the HSNO Act 1996, Approval number HSR002571 See <a href="http://www.epa.govt.nz">www.epa.govt.nz</a> for approval controls.
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## Section 16: OTHER INFORMATION

This Safety Data Sheet was updated on the date shown and supersedes all previous versions.

### Disclaimer

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Please contact Morton Smith - Dawe, if further information is required.

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