

46-0-0

SECTION 1. IDENTIFICATION

Product Identifier	46-0-0
Other Means of Identification	Urea
Product Family	Agriculture
Recommended Use	Fertilizer. Deicer.
Restrictions on Use	Not applicable.
Supplier Identifier	TerraLink Horticulture Inc., 464 Riverside Road, Abbotsford, BC, V2S 7M1, 1-800-661-4559
Emergency Phone No.	CANUTEC, In the event of an emergency involving dangerous goods, call 613-996-6666 or *666 on a cellular phone.
SDS No.	0055
Date of Preparation	February 26, 2016

SECTION 2. HAZARD IDENTIFICATION**Classification**

Not classified under any hazard class.

Label Elements

Not applicable

Other Hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	%	Other Identifiers
Urea	57-13-6	98	Urea
Urea, reaction products with formaldehyde	68611-64-3	1	n/a
IMIDODICARBONIC DIAMIDE	108-19-0	1	Biuret

SECTION 4. FIRST-AID MEASURES**First-aid Measures****Inhalation**

Move victim to fresh air. Give artificial respiration ONLY if breathing has stopped, assist breathing with oxygen. Obtain medical assistance if necessary.

Skin Contact

Wash gently and thoroughly with lukewarm, gently flowing water and mild soap for 5 minutes. Clean clothing, shoes and leather goods.

Eye Contact

Rinse the contaminated eye(s) with lukewarm, gently flowing water for at least 15 minutes. If wearing contact lens(es), remove after 5 minutes and continue rinsing for at least 10 minutes if eye irritation persists, get medical advice or attention.

Ingestion

Give large amounts of water. Induce vomiting. Never give anything by mouth to an unconscious or convulsing person.

First-aid Comments

No specific antidote. Medical staff must contact Poison Control Centre.

Most Important Symptoms and Effects, Acute and Delayed

None known.

Immediate Medical Attention and Special Treatment**Target Organs**

None known.

Special Instructions

No information available.

Medical Conditions Aggravated by Exposure

None known.

SECTION 5. FIRE-FIGHTING MEASURES**Extinguishing Media****Suitable Extinguishing Media**

Use an extinguishing agent suitable for the surrounding fire.

Unsuitable Extinguishing Media

None known.

Specific Hazards Arising from the Product

Does not burn. Can ignite if strongly heated.
Ammonia, biuret, cyanuric acid.

Special Protective Equipment and Precautions for Fire-fighters

Use positive pressure supplied air breathing apparatus, chemical goggles, body covering, protective clothing. Fire-fighters should wear appropriate protective equipment and self contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

SECTION 6. ACCIDENTAL RELEASE MEASURES**Personal Precautions, Protective Equipment, and Emergency Procedures**

Use the personal protective equipment recommended in Section 8 of this safety data sheet.

Environmental Precautions

Avoid run off into streams, sewers and ditches that leads to waterways.

Methods and Materials for Containment and Cleaning Up

Prevent product from leaking into the environment. Small spill: Move containers from spill area. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor. Large spill: Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see section 1 for emergency contact information and section 13 for waste disposal.

Other Information

No other information was found.

SECTION 7. HANDLING AND STORAGE**Precautions for Safe Handling**

Avoid contact with eyes, skin and clothing. Keep container closed. Use only with adequate ventilation. Avoid breathing dust. Wash thoroughly after handling.

Product Identifier: 46-0-0

Date of Preparation: February 26, 2016

Page 02 of 06

Conditions for Safe Storage

Keep container tightly closed. Keep container in a cool, well-ventilated area.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

Chemical Name	ACGIH TLV®		OSHA PEL		AIHA WEEL	
	TWA	STEL	TWA	Ceiling	8-hr TWA	TWA
Urea			15 mg/m3			

Appropriate Engineering Controls

The hazard potential of this product is relatively low. General ventilation is usually adequate. For large scale use of this product: use local exhaust ventilation, if general ventilation is not adequate to control amount in the air.

Individual Protection Measures

Eye/Face Protection

Not required but it is good practice to wear safety glasses or chemical safety goggles.

Skin Protection

Wear long sleeved clothing and protective gloves to prevent prolonged or repeated skin contact. Refer to OSHA General Requirements for Personal Protective Equipment 29 CFR 1910.132.

Butyl rubber, natural rubber, neoprene rubber, nitrile rubber, polyvinyl alcohol, polyvinyl chloride, Viton®, Viton®/butyl rubber, Barrier® (PE/PA/PE), Silver Shield/4H® (PE/EVAL/PE).

Respiratory Protection

Not normally required if product is used as directed. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapours or dust below their respective threshold limit value. Dust mask.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Basic Physical and Chemical Properties

Appearance	White crystalline pellets.
Odour	Ammonia-like
Odour Threshold	Not available
pH	8.8 (10% solution)
Melting Point/Freezing Point	132.7 °C (270.9 °F) (melting); Not applicable (freezing)
Initial Boiling Point/Range	Not applicable
Flash Point	Not applicable
Evaporation Rate	Not applicable
Flammability (solid, gas)	Not applicable
Upper/Lower Flammability or Explosive Limit	Not applicable (upper); Not applicable (lower)
Vapour Pressure	0.08 kPa
Vapour Density (air = 1)	Not applicable
Relative Density (water = 1)	1.335 at 20 °C (68 °F)
Solubility	1000 g/100 mL in water; Highly soluble in alcohols (e.g. ethanol).
Partition Coefficient, n-Octanol/Water (Log Kow)	-2.97 - -2.26 (calculated)
Auto-ignition Temperature	Not available
Decomposition Temperature	135 °C (275 °F)
Viscosity	Not applicable (kinematic); Not applicable (dynamic)
Other Information	
Physical State	Solid
Molecular Weight	60.06

Product Identifier: 46-0-0

Date of Preparation: February 26, 2016

Page 03 of 06

Bulk Density

760 kg/m³ (47 lb/ft³)

SECTION 10. STABILITY AND REACTIVITY

Reactivity

Absorbs moisture from the air; hygroscopic.

Chemical Stability

Normally stable.

Possibility of Hazardous Reactions

None known.

Conditions to Avoid

High temperatures. Water, moisture or humidity.

Incompatible Materials

Ketones (e.g. acetone), oxidizing agents (e.g. peroxides), reducing agents (e.g. hydroquinone), strong acids (e.g. hydrochloric acid), strong bases (e.g. sodium hydroxide). Moisture.

Hazardous Decomposition Products

None known.

SECTION 11. TOXICOLOGICAL INFORMATION

Likely Routes of Exposure

Inhalation; skin contact; eye contact; ingestion.

Acute Toxicity

Chemical Name	LC50	LD50 (oral)	LD50 (dermal)
Urea		8471 mg/kg (male rat)	

LC50: No information was located.

LD50 (dermal): No information was located.

Skin Corrosion/Irritation

Not a skin irritant.

Serious Eye Damage/Irritation

May cause very mild irritation based on information for closely related chemicals.

STOT (Specific Target Organ Toxicity) - Single Exposure

Inhalation

Not considered harmful.

Skin Absorption

Not expected to be absorbed.

Ingestion

No information was located.

Aspiration Hazard

Not known to be an aspiration hazard.

STOT (Specific Target Organ Toxicity) - Repeated Exposure

No information was located.

Respiratory and/or Skin Sensitization

Not a skin sensitizer. Not a respiratory sensitizer.

Carcinogenicity

Not known to cause cancer.

Reproductive Toxicity

Development of Offspring

Product Identifier: 46-0-0

Date of Preparation: February 26, 2016

Page 04 of 06

No information was located.

Sexual Function and Fertility

No information was located.

Effects on or via Lactation

No information was located.

Germ Cell Mutagenicity

No information was located.

Interactive Effects

No information was located.

SECTION 12. ECOLOGICAL INFORMATION

Not hazardous to the environment.

Ecotoxicity

Toxicity is primarily associated with pH.

Persistence and Degradability

No ingredient of this product or its degradation products is known to be highly persistent.

Bioaccumulative Potential

This product and its degradation products are not known to bioaccumulate.

Mobility in Soil

If released into the environment, this product can move slowly through the soil.

Other Adverse Effects

No known significant effects or critical hazards.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal Methods

Recycle and reuse product, if possible. Dispose of according to local, provincial and federal government requirements.

SECTION 14. TRANSPORT INFORMATION

Not regulated under Canadian TDG regulations. Not regulated under US DOT Regulations.

Special Precautions Not applicable

Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15. REGULATORY INFORMATION

Safety, Health and Environmental Regulations

Canada

WHMIS 1988 Classification

Not a WHMIS controlled product.

Domestic Substances List (DSL) / Non-Domestic Substances List (NDSL)

Domestic Substances List / Non-Confidential.

CEPA - National Pollutant Release Inventory (NPRI)

Not specifically listed.

USA

Toxic Substances Control Act (TSCA) Section 8(b)

Listed on the TSCA Inventory.

SECTION 16. OTHER INFORMATION

NFPA Rating	Health - 0 Flammability - 0 Instability - 0
	Based on Urea
SDS Prepared By	Regulatory and Technical Resources
Phone No.	604-557-1497
Date of Preparation	February 26, 2016
Date of Last Revision	December 06, 2016
Key to Abbreviations	ACGIH® = American Conference of Governmental Industrial Hygienists AIHA® = AIHA® Guideline Foundation. HSDB® = Hazardous Substances Data Bank IARC = International Agency for Research on Cancer NFPA = National Fire Prevention Association NIOSH = National Institute for Occupational Safety and Health NTP = National Toxicology Program OSHA = US Occupational Safety and Health Administration RTECS® = Registry of Toxic Effects of Chemical Substances
References	CHEMINFO database. Canadian Centre for Occupational Health and Safety (CCOHS). Registry of Toxic Effects of Chemical Substances (RTECS®) database. Dassault Systèmes/BIOVIA ("BIOVIA"). Available from Canadian Centre for Occupational Health and Safety (CCOHS).
Disclaimer	Terralink Horticulture Inc. provides the information contained herein in good faith, but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose. TERRALINK HORTICULTURE INC. MAKES NO REPRESENTATIONS OR WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THE INFORMATION SET FORTH HEREIN OR THE PRODUCT TO WHICH THE INFORMATION REFERS. ACCORDINGLY, TERRALINK HORTICULTURE INC. WILL NOT BE RESPONSIBLE FOR DAMAGES RESULTING FROM THE USE OF OR RELIANCE UPON THIS INFORMATION.