

Section 4 – Emergency First Aid Procedures * * *

Eye Contact:	Flush with cool water. Remove contact lenses, if applicable, and continue flushing. Obtain medical attention if irritation persists.
Skin Contact:	Flush with cool water. Wash with soap and water. Obtain medical attention if irritation persists.
Inhalation:	If symptoms develop, move victim to fresh air. If symptoms persist, obtain medical attention. If breathing has stopped, trained personnel should administer CPR immediately.
Ingestion:	Do not induce vomiting. Rinse mouth with water, then drink one or two glasses of water. Obtain medical attention. Never give anything by mouth if victim is unconscious or is convulsing.
Notes to physician:	Symptoms may be delayed.
General advice:	If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Avoid contact with eyes and skin. Wear impervious gloves and safety glasses. Keep out of reach of children and animals

* * Section 5 – Fire and Explosion Data * * *
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Flammable properties:	Not flammable by WHMIS/OSHA criteria.
Extinguishing media	
Suitable extinguishing media:	Treat for surrounding material
Unsuitable extinguishing media:	N.A.
Protection of firefighters:	N.A.
Specific hazards arising from the chemical:	N.A.
Protective equipment for firefighters:	Firefighters should wear full protective clothing including self contained breathing apparatus.
Hazardous combustion products:	May include and are not limited to: Oxides of carbon. Oxides of nitrogen. Ammonia.
Explosion data	
Sensitivity to mechanical impact	N.A.
Sensitivity to static charge:	N.A.

* * * Section 6 – Accidental Release Measures * * *
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Personal precautions:	Keep unnecessary personnel away. Wear appropriate protective clothing.
Methods for containment:	Stop leak if you can do so without risk. Prevent entry into waterways, sewers, basements or confined areas.

Methods for cleaning up: Before attempting clean up, refer to hazard data given above. Small spills may be absorbed with non-reactive absorbent and placed in suitable, covered, labeled containers.
Prevent large spills from entering sewers or waterways. Contact emergency services and supplier for advice. Never return spills in original containers for re-use.

***** Section 7 – Handling and Storage *****

Handling: Use good industrial hygiene practices in handling this material.

Storage: Keep out of reach of children. Store in a closed container away from incompatible materials.

***** Section 8 – Exposure Controls / Personal Protection *****

Exposure limits Ingredient(s)	Exposure Limits
Urea	ACGIH-TLV Not established OSHA-PEL Not established

Engineering controls: Ensure adequate ventilation, especially in confined areas. Use only under good ventilation conditions or with respiratory protection.

Personal protective equipment

Eye / face protection: Wear safety glasses with side shields.

Hand protection: Impervious gloves. Nitrile, Viton, Butyl

Skin and body protection: As required by employer code.

Respiratory protection: Where exposure guideline levels may be exceeded, use an approved NIOSH respirator.

General hygiene considerations: Avoid breathing vapors. Handle in accordance with good industrial hygiene and safety practice. When using do not eat or drink. Wash hands before breaks and immediately after handling the product.

***** Section 9 – Physical Chemical Properties *****

Boiling Point:	104°C
Specific Gravity:	1.087-1.093 @ 20°C
Solubility in H₂O:	100%
Appearance:	Clear
Color:	Colorless
Odor:	Slight ammonia
Form:	Liquid
Physical state:	Liquid
Freezing Point:	-12°C
pH:	9.8-10.0

*** Section 10 - Chemical Stability & Reactivity Data ***
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Chemical stability:	Stable under recommended storage conditions.
Conditions to avoid:	Do not mix with any other chemical or product.
Incompatible materials:	Acids. Oxidizers. Alkalis.
Hazardous decomposition products:	May include and are not limited to: Oxides of carbon. Oxides of nitrogen. Ammonia.
Possibility of hazardous reactions:	Hazardous polymerization does not occur.

*** Section 11 – Toxicological Information ***

Component analysis – LC50

Ingredient(s)	LC50
Urea	Not available

Component analysis – Oral LD50

Ingredient(s)	LD50
Urea	11,500–13,000 mg/kg mouse; 14,300–15,000 mg/kg rat; 510 mg/kg cattle

Effects of acute exposure

Eye:	May cause irritation.
Skin:	May cause irritation.
Inhalation:	Not available
Ingestion:	May cause stomach distress, nausea or vomiting.
Sensitization:	Non-hazardous by WHMIS/OSHA criteria.
Chronic effects:	Non-hazardous by WHMIS/OSHA criteria.
Carcinogenicity:	Non-hazardous by WHMIS/OSHA criteria.
Mutagenicity:	Non-hazardous by WHMIS/OSHA criteria.
Reproductive effects:	Non-hazardous by WHMIS/OSHA criteria.
Teratogenicity:	Non-hazardous by WHMIS/OSHA criteria.

*** Section 12 – Ecological Information ***
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Ecotoxicity:	Components of this product have been identified as having potential environmental concerns.
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Ecotoxicity – Freshwater Fish Species Data

Urea	57-13-6	96 Hr LC50 Barillius barna: >9100 mg/L
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Ecotoxicity – Microtox Data

Urea	57-13-6	24HrEC50 Daphnia magna straus: >10000 mg/L
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Environmental effects:	Not available
Aquatic toxicity:	Not available
Persistence / degradability:	Not available
Bioaccumulation / accumulation:	Not available
Partition coefficient:	Not available
Mobility in environmental media:	Not available
Chemical fate information:	Not available
Other adverse effects:	Not available

*** Section 13 – Disposal Considerations ***

Waste codes:	Not available
Disposal instructions:	Review federal, provincial, and local government requirements prior to disposal.
Waste from residues/unused products:	Not available
Contaminated packaging:	Not available

*** Section 14 – Transportation Information ***
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US Department of Transportation (DOT):	Not regulated as dangerous goods.
Transportation of Dangerous Goods (TDG – Canada):	Not regulated as dangerous goods.

*** Section 15 – Regulatory Information ***
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Canadian federal regulations:	This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.	
US Federal regulations:	The product is a “Hazardous Chemical” as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. All components are on the U.S. EPA TSCA Inventory List.	
Occupational Safety and Health Administration (OSHA)		
29 CFR 1910.1200 hazardous chemical:	Yes	
Superfund Amendments and Reauthorization Act of 1986 (SARA)		
Hazard categories:	Immediate Hazard – Yes Delayed Hazard – No Fire Hazard – No Pressure Hazard – No Reactivity Hazard – No	
Section 302 extremely hazardous substance:	No	
Section 311 hazardous chemical:	Yes	
Clean Air Act (CAA)	Not available	
Clean Water Act (CWA)	Not available	
Safe Drinking Water Act (SDWA)	Not available	
Drug Enforcement Agency (DEA)	Not available	
Food and Drug Administration (FDA)	Not available	
WHMIS status	Controlled	
WHMIS classification	Class D – Division 2B	
WHMIS labeling		
State regulations	This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.	
Inventory name	Inventory name	On inventory (yes/no)*
Country(s) or region		
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No

United States & Puerto Rico Toxic Substances Control Act (TSCA) Inventory Yes

*A “Yes” indicates that all components of this product comply with the inventory requirements administered by the governing country(s).

***** Section 16 – Other Information *****

Disclaimer:

Information contained herein was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond control of the supplier, it is assumed that users of this material have been fully trained according to the requirements of all applicable legislation and regulatory instruments. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries or consequential damages which may result from the use of or reliance on any information contained in this document.