

MATERIAL SAFETY DATA SHEET

SECTION 1 PRODUCT IDENTIFICATION

CUSTOM BLENDED FERTILIZER: CONTAINS UREA, MONOAMMONIUM PHOSPHATE, AND POTASH

Guaranteed Minimum Analysis

%TOTAL NITROGEN	% AVAILABLE PHOSPHORIC ACID	% SOLUBLE POTASH
12	35	12

SECTION 2 COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient	CAS Number	% by WT	LD ₅₀
Urea	57-13-6	Varies (see above)	14300 mg/kg Rat/oral
Monoammonium Phosphate	7722-76-1	Varies (see above)	5000 mg/kg Rat/oral
Muriate of Potash	7447-40-7	Varies (see above)	2430 mg/kg Rat/oral

SECTION 3 HAZARDS IDENTIFICATION

Inhalation	Dusty conditions may cause mechanical aggravation to respiratory mucous membranes.
Ingestion	Minimal hazard under normal conditions of use. Ingestion of large quantities may cause gastrointestinal discomfort, vomiting, weakness or other medicinally related problems.
Skin Contact	Moderately irritating. Slight dermal abrasion is possible with prolonged contact, especially around cuffs and collars. Avoid prolonged skin contact.
Eye Contact	Dust from this product may cause particulate discomfort to eyes, including stinging, watering and redness.

SECTION 4 FIRST AID MEASURES

Inhalation	Remove affected person to fresh air. Seek medical attention if condition persists.
Ingestion	If large amount is ingested, give 2-3 glasses of water and induce vomiting. Seek medical attention.
Skin Contact	Remove contaminated clothing, wash skin well with soap and water. Launder clothing before re-use.
Eye Contact	Flush eyes for at least 15 minutes. Seek medical attention if condition persists.

SECTION 5 FIRE FIGHTING MEASURES

Flash Point	Not applicable
Autoignition Temperature	Not applicable
Flammable Limits	Not applicable
Extinguishing Media	Use extinguishing medium suitable for surrounding fire.
Special Fire Fighting Procedures	Approach fire from up wind and wear self-contained breathing apparatus.
Unusual Fire and Explosion Hazards	

During extremely high temperatures, the blend may reach melting point and decompose to release NH_3 , SO_x , PO_x , CN , CO_x

SECTION 6 ACCIDENTAL RELEASE MEASURES

Spill and Leak Procedure	Large fertilizer spills can harm or kill vegetation. Stay upwind and away from spill (dust hazard). Wear appropriate protective equipment including respiratory protection as conditions warrant. Prevent spilled material from entering sewers, storm drains, other unauthorized treatment drainage systems, and natural waterways. Notify appropriate federal, provincial, and local agencies as required.
Disposal Considerations	Sweep up material and place in suitable container for use as a fertilizer or for disposal. Conform to federal, provincial/state and local regulations.

SECTION 7 HANDLING AND STORAGE

Precautions	Hygroscopic if relative humidity is over 76%.
Handling	The use of appropriate respiratory protection is advised when concentrations exceed any established exposure limits. Wash thoroughly after handling. Wash contaminated clothing or shoes. Use good personal hygiene practice.
Storage	Store in a cool, dry area. Prevent spillage and separate from strong oxidizers. Use normal safety procedures and maintain proper hygiene practices when handling this product. Keep out of reach of children. Protect containers against physical damage.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Recommendations listed in this section indicate the type of equipment which will provide protection against overexposure to this product. Conditions of use, adequacy of engineering or other control measures, and actual exposures will dictate the need for specific protective devices at your workplace.

Ventilation	Adequate natural or general ventilation.
Respiratory Protection	Approved single use dust respirator when necessary.
Protective Clothing	Normal body-covering work clothes.
Eye Protection	In dusty conditions, safety glasses with side shields or goggles may be necessary.
Hygienic Practices	Avoid contact with the skin and avoid breathing vapours. Do not eat, drink, or smoke in work area. Wash hands before eating, drinking, or using restroom.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point	N/A
Melting Point	N/A
Solubility in Water	Soluble
% Volatile (vol)	N/A
Specific Gravity	N/A
Vapour Pressure (mmHg)	N/A
Evaporation Rate	N/A
pH	N/A
Appearance and Odour	Free flowing multicoloured granules.

SECTION 10 STABILITY AND REACTIVITY

Stability	Stable under normal conditions of storage and handling. Material is hygroscopic (may absorb moisture from air when relative humidity >72%.)
Hazardous Polymerization	Will not occur.
Conditions and Materials to Avoid	Strong oxidizing agents such as hypochlorites, nitric acid, sodium nitrite, phosphorus pentachloride and nitrosyl perchlorate. Hot nitric acid and other strong acids. Most metals.
Hazardous Decomposition Products	Ammonia, Phosphorous Oxides, Nitrogen Oxides, Sulphur Oxides, CN, CO _x .

SECTION 11 TOXICOLOGICAL INFORMATION

Component	LD₅₀
Urea	14300 mg/kg Rat/Oral
Ammonium Phosphate	5000 mg/kg Rat/Oral
Potash	2430 mg/kg Rat/Oral

Routes of Exposure Ingestion, Inhalation

SECTION 12 TRANSPORT INFORMATION

This product is not regulated by Transport Canada (TDG).
This product is not regulated by US DOT.

SECTION 13 NOTES

SECTION 14 MSDS PREPARATION INFORMATION

Prepared by	Border Chemical Company Limited - (204) 222-3276
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Date Reviewed/Revised	April 30, 2006
Emergency Phone Number	(204) 222-3276 - 24 hours

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