




SAFETY DATA SHEET

Section 1: Product and Company Identification

Product Name: MacroBoost
Product Use: Agricultural fertilizer
Supplier: Omex Agriculture Inc.
 Box 301
 290 AgriPark Road
 Oak Bluff, Manitoba, Canada
 R0G 1N0
 Web address: www.omex.com
Phone Number: (204) 477-4052

Section 2: Hazards Identification

WHMIS Classification	Transport Symbol	Personal Protective Equipment
 D2B	 Not Regulated	

Emergency Overview:

Appearance, Colour and Odour: Liquid emulsion, blue, odourless.

Warning. Causes eye irritation.

Canada: This product is hazardous and controlled under WHMIS.

USA: This is a hazardous material as defined by 29 CFR1910.1200, OSHA Hazard Communication Standard.

Potential Health Effects

ACUTE (short term):

Relevant Route(s) of Exposure:

Skin Contact, Eye Contact

Inhalation: Mists may be irritating to the nose, throat and respiratory system. Symptoms of irritation may include coughing and shortness of breath.

Ingestion: Swallowing may cause irritation to the lips, mouth, throat and stomach with nausea, and vomiting.

Skin: Prolonged skin contact may cause mild to moderate irritation.

Eye: Liquid and/or mist are expected to cause mild to moderate irritation. Irritation is expected to be reversible.

CHRONIC (long term): see Section 11 for additional toxicological data

Long-term over-exposure by ingestion may cause adverse effects to the kidneys. Ingestion is not an expected route of exposure when this product is used for its intended purpose.

Medical Conditions Aggravated by Exposure:

Individuals with "Wilson's disease", a rare condition that interferes with the body's ability to eliminate copper, should consult a physician before exposure to this product.

Interactions With Other Chemicals:

Incompatible with strong oxidizing agents. See Section 10.

Potential Environmental Effects:

Copper compounds released into the natural environment can have long-term adverse effects on the aquatic environment. This preparation may be harmful to livestock and wildlife if swallowed. Prevent release of this product to natural waters.



SAFETY DATA SHEET

Section 3: Composition / Information on Ingredients

Product is an aqueous mixture of Urea, Ammonium polyphosphate, Dipotassium hydrogen phosphate and Copper inorganic salts.

Hazardous Ingredients:

<u>Chemical Name</u>	<u>CAS No.</u>	<u>Wt.%</u>
Inorganic Copper as phosphate salt	7798-23-4	3 - 7

Section 4: First Aid Measures

Inhalation:	If symptoms are experienced, remove source of contamination or move victim to fresh air. If symptoms persist, obtain medical advice.
Eye Contact:	Quickly and gently blot or brush chemical off the face. Immediately flush the contaminated eye(s) with lukewarm, gently flowing water for 15-20 minutes, while holding the eyelid(s) open. Take care not to rinse contaminated water into the unaffected eye or onto the face. If irritation persists, seek medical attention.
Skin Contact:	If irritation occurs, flush area with lukewarm, gently running water for at least 5 minutes, or until the chemical is removed. If irritation persists, obtain medical advice.
Ingestion:	Have victim rinse mouth thoroughly with water. Do not induce vomiting. Contact poison control center or obtain medical advice immediately.

Section 5: Fire Fighting Measures

Flammable Properties:	Not applicable, product is not combustible.
Suitable extinguishing Media:	Use extinguishing media appropriate for the surrounding fire. Dry chemical, water spray, chemical foam, carbon dioxide, water fog.
Unsuitable extinguishing Media:	Not applicable
Explosion Data	
Mechanical Impact:	Not applicable
Static Discharge:	Not applicable
Specific Hazards arising from the Chemical:	Possible decomposition at very high temperatures (>130°C) may form toxic gases of phosphorus oxide and copper fumes.
Protective Equipment and precautions for firefighters:	Firefighters should wear full protective gear including self-contained breathing apparatus.



SAFETY DATA SHEET

Section 6: Accidental Release Measures

- Personal Precautions:** Wear adequate personal protective equipment. Ventilate area.
- Environmental Precautions:** Do not allow product to reach natural waterways or ground water. Fertilizer products may be harmful to livestock and wildlife if swallowed. Clean up any spilled fertilizer products immediately, particularly where bulk quantities of fertilizers are handled.
- Methods for Containment:** Stop leak if it can be done without risk.
- Methods for Clean-up:** Soak up the spilled liquid using a suitable inert absorbent. Collect product and contaminated absorbent and place in suitable, labeled containers for proper disposal. Clean the spill area with plenty of water.

Section 7: Handling and Storage

- Handling:** Avoid contact with eyes. Avoid breathing mists of this product. Do not ingest. Wash hands thoroughly after handling and before eating or smoking.
- Storage:** Store in suitable, labeled containers, preferably the supplier container. Protect from damage. It is good practice to keep storage containers closed when not in use and when empty. Protect from freezing.

Section 8: Exposure Controls/Personal Protection

Exposure Guidelines

Consult local authorities for acceptable exposure limits.

<u>Ingredient</u>	<u>Ontario TWAEV</u> <u>(ppm)</u>	<u>ACGIH TLV</u> <u>(8-hr. TWA)</u> <u>(ppm)</u>	<u>U.S. OSHA PEL</u> <u>(8-hr. TWA)</u> <u>(ppm)</u>
Copper compounds (as Cu)	1 (dusts and mists, as Cu) 0.2 (fume)	1 (dusts and mists, as Cu) 0.2 (fume, as Cu)	1 (dusts and mists, as Cu) 0.1 (fume, as Cu)
Ammonia (decomposition product)	17 (25 ppm) 24 (35 ppm) STEL	25 ppm 35 ppm STEL	35 (50 ppm)
Other exposure guidelines: AIHA WEEL (Workplace Environmental Exposure Level) exposure to Urea = 10 mg/m ³ TWA.			

Exposure Controls

Engineering Controls: Provide exhaust ventilation or other engineering controls to keep concentrations below the exposure limits listed above.

Personal Protection

Eye/Face Protection: Wear chemical splash goggles. Where splashing is possible wear a face-shield.

Skin Protection: Wear water-impervious gloves.

Respiratory Protection: In workplaces where airborne levels of the mists exceed the exposure limits, wear an appropriate respirator. A positive pressure supplied-air respirator should be worn when concentrations are unknown or in other circumstances where air purifying respirators may be inadequate.

A respiratory protection program that meets Canadian Standards Association (CSA) Standard Z94.4-2002 must be followed whenever workplace conditions warrant a respirator's use.

Other Protective Equipment: In workplaces where this product is handled in bulk quantities, have a safety shower and eyewash fountain readily available in the work area.

General Hygiene Measures: Avoid contact with eyes. Wash hands thoroughly after handling and before smoking or eating.



SAFETY DATA SHEET

Section 9: Physical and Chemical Properties

Physical State:	Liquid	Flash Point & method:	Not applicable
Appearance, Colour and Odour:	Blue, odourless	Autoignition Temperature:	Not applicable
Odour Threshold:	Not available	Flammability Limits in Air:	Not applicable
pH:	8 – 8.5	Vapour Pressure:	Not available
Specific gravity: (water = 1)	1.28 – 1.29	Vapour Density: (Air = 1)	Not available
Partition coefficient: (n-octanol/water)	Not applicable	Evaporation Rate: (n-Butyl Acetate = 1)	Not applicable
Solubility:	Soluble in water	Boiling Point/Range:	Similar to water
Viscosity:	Not available	Freezing Point:	Similar to water

Section 10: Stability and Reactivity

Chemical Stability:	Stable
Conditions to Avoid:	Avoid prolonged exposure to high temperatures.
Incompatible Materials:	Incompatible with hypochlorite bleach and other oxidizing agents. Use caution when mixing this product with other agricultural chemicals. Some chemicals may be incompatible. Contact Omex Agriculture Inc. for further information.
Hazardous Decomposition Products:	When heated above 130°C, may generate phosphorus oxides.
Possibility of Hazardous Reactions:	Not available

Section 11: Toxicological Information

Acute Toxicity Data

Acute oral, dermal and inhalation toxicity data are not available for this preparation.

Other Toxicity Data

Carcinogenicity:	This preparation does not contain any component that is considered a human carcinogen by IARC (International Agency for Research on Cancer), ACGIH (American Conference of Governmental Industrial Hygienists, OSHA or NTP (National Toxicology Program).
Irritation:	No experimental data available. Direct contact may cause mild eye irritation and skin irritation. Mists are may be irritating to the respiratory tract.
Corrosivity:	Not applicable
Sensitization:	Not available
Neurological Effects:	Not available
Genetic Effects:	Not available
Reproductive Effects:	Not available
Developmental Effects:	Not available
Target Organ Effects:	Kidney damage was observed in dogs following administration of 800 mg/kg dipotassium phosphate in the diet for 14 to 38 weeks.



SAFETY DATA SHEET

Section 12: Ecological Information

Ecotoxicity:	This preparation will release phosphate and ammonia. Phosphate and ammonia in aquatic environments causes algae growth which may increase turbidity and deplete oxygen resulting in a hazard to fish and other aquatic organisms.
	This product will release Copper compounds which can be harmful or toxic to aquatic organisms.
Persistence/Degradability:	Not available
Bioaccumulation/Accumulation:	Not expected to bioaccumulate.
Mobility:	Completely soluble in water.

Section 13: Disposal Considerations

Waste Disposal Method:	Discard the empty container in household garbage. Follow municipal, provincial and federal laws and regulations, for proper disposal of fertilizer, where they apply.
-------------------------------	---

Section 14: Transport Information:

Transportation of Dangerous Goods (TDG):	Not regulated as a dangerous good.
---	------------------------------------

Section 15: Regulatory Information

Canada	This product has been classified in accordance with the hazard criteria of the <i>Controlled Products Regulations</i> and the SDS contains all the information required by the <i>Controlled Products Regulations</i> .
WHMIS Classification: (for workplace exposures)	D2B – Material Causing Other Toxic Effects – eye irritation. IDL Copper compounds n.o.s.
Registration:	Fertilizer product, registered and subject to the regulations under the Fertilizers Act.
NPRI Substances:	Copper compounds are NPRI reportable substances.

Section 16: Other Information

Revision Date:	June 7, 2010
Supplier Disclaimer:	The information contained herein is, to the best of the Supplier's (Omex Agriculture Inc.) knowledge and belief, accurate and reliable as of the date of preparation of this document. However, no warranty or guarantee, express or implied, is made as to the accuracy or reliability, and the Supplier shall not be liable for any loss or damage arising out of the use thereof. No authorization is given or implied to use any patented invention without a license. In addition, the Supplier shall not be liable for any damage or injury resulting from abnormal use, from any failure to adhere to recommended practices or from any hazards inherent in the nature of the product.
Prepared by:	LEHDER Environmental Services Limited www.lehder.com 519-336-4101
	While LEHDER Environmental Services Limited believes that the data set forth herein is accurate, as of the date hereof, LEHDER makes no warranty with respect thereto and expressly disclaims all liability for reliance thereon. Such data is offered solely for your consideration, investigation and verification.