



MATERIAL SAFETY DATA SHEET (MSDS)

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Identifier Trade Name: Erupt™ HY-Max™ Enhancers Product Name: HY-Meta™	Product Use Plant Fertilizer & Targeted Metabolic Enhancer N-P-K Analysis; 0 - 2.7 - 5.5 ALSO CONTAINS NON-PLANT FOOD INGREDIENTS
Chemical Family: Plant Nutrient	TDG Class: Not Regulated
Manufacturer's Name Ecological Innovations	Emergency Telephone Numbers Health: Transport: 1-888-989-8389
Manufacturer's Address 3370 Greenwood Rd. Greenwood, ON L0H 1H0 Canada	Website www.eruptnutrients.com

SECTION 2 - COMPOSITION OF INGREDIENTS

Ingredients	CAS REG #	OSHA PEL	ACGIH TLV	WEIGHT %
Soluble Potash (K ₂ O)	12136-45-7	n/e	n/e	5.5%
Available Phosphorus (P ₂ O ₅)	1314-56-3	n/e	n/e	2.7%
Sulphur	7704-34-9	n/e	n/e	2.5%
Water Soluble Magnesium	7439-95-4	n/e	n/e	0.47%
Iron EDTA	15275-07-7	n/e	n/e	0.0055%
Manganese EDTA	55448-20-9	n/e	n/e	0.0028%
Zinc EDTA	12519-36-7	n/e	n/e	0.0028%
Copper EDTA	54453-03-1	n/e	n/e	0.0028%
Molybdenum **	7439-98-7	n/e	n/e	< Trace Amount
Boron	7440-42-8	n/e	n/e	0.0011%
Thiamine Mononitrate (Vitamin B ₁)	532-43-14	n/e	n/e	0.31%
Riboflavin-5-Phosphate (Vitamin B ₂)	83-88-5	n/e	n/e	0.012%
Niacin USP (Vitamin B ₃)	59-67-6	n/e	n/e	0.605%
D-Calcium Pantothenate (Vitamin B ₅)	137-08-6	n/e	n/e	0.605%
Pyridoxine HCl (Vitamin B ₆)	58-56-0	n/e	n/e	0.302%
Folic Acid (Vitamin B ₉)	59-30-3	n/e	n/e	0.0081%
Cobalimin (Vitamin B ₁₂)	68-19-9	n/e	n/e	0.0059%
D-Glucose	50-99-7	n/e	n/e	1.47%
Free L-Amino Complex (17)				5.13%
L-Alanine	56-41-7	n/e	n/e	
L-Arganine Base	74-79-3	n/e	n/e	
L-Aspartic Acid	56-84-8	n/e	n/e	



MATERIAL SAFETY DATA SHEET (MSDS)

Ingredients	CAS REG #	OSHA PEL	ACGIH TLV	WEIGHT %
L-Cysteine HCl	7048-04-6	n/e	n/e	
L-Glutamine	56-85-9	n/e	n/e	
L-Glycine	56-40-6	n/e	n/e	
L-Isoleucine	73-32-5	n/e	n/e	
L-Leucine	61-90-5	n/e	n/e	
L-Lysine HCl	657-27-2	n/e	n/e	
L-Methionine	63-68-3	n/e	n/e	
L-Phenylalanine	63-91-2	n/e	n/e	
L-Proline	98-92-0	n/e	n/e	
L-Serine	56-45-1	n/e	n/e	
L-Threonine	72-19-5	n/e	n/e	
L-Tryptophan	73-22-3	n/e	n/e	
L-Tyrosine	60-18-4	n/e	n/e	
L-Valine	72-18-4	n/e	n/e	

**Below threshold limits

Hazardous Components: N/A

Not classified as a hazardous material by the criteria of the OSHA Hazard Communication Regulation, or EPA 40 CFR and SARA.

SECTION 3 – PHYSICAL DATA

Physical State: Liquid

Specific Gravity: Not Available

Boiling Point: Not Available

Vapour Pressure: Not Available

% Volatiles: Not Available

Solubility in Water: Soluble

Appearance/Odour: Dark Greenish Brown / Foul

pH: 5.8 (Slightly Acidic)

Freezing/Melting Point: 0°C / Not Applicable

Vapour Density: Not Available

Evaporation Rate: Not Available

SECTION 4 – FIRE AND EXPLOSION

Flash Point: Not Available

Lower Explosion Limit: Not Available

Fire Extinguisher Media: Foam, Dry Chemical, Carbon Dioxide, Water Fog

Fire Fighting Procedures: Minimize the amount of water used and contain the run-off. The products will decompose on heating.

Other Fire or Explosion Hazards: foul odor or noxious fumes may be formed in a fire situation.

Autoignition Temperature: Not Applicable

Upper Explosion Limit: Not Available



MATERIAL SAFETY DATA SHEET (MSDS)

SECTION 5 – REACTIVITY DATA

Stability: Stable

Hazardous Polymerization: Will not occur

Conditions to Avoid: Elevated Temperatures / Flammable in presence of open flame

Incompatibility (Materials to Avoid): None Known

Hazardous Decomposition Products: None Known

SECTION 6 - HEALTH HAZARD DATA

Warning: Phosphorous pentoxide and potassium oxide may cause burns as it reacts with moisture on the skin. Do not inhale or ingest.

Acute Effects of Overexposure: Product can be irritating to the eyes, nose, throat and respiratory tract. May cause coughing and sneezing.

Effects of Chronic Exposure: None of the ingredients are known carcinogens. Some of the products are corrosive and others may act as physical irritants to mucous membranes and the eyes. May cause skin sensitization or other allergic responses. Prolonged exposure may cause weakness, headache, and kidney injury. Ingestion of product can cause severe gastrointestinal irritation. Ingestion of large amounts may result in death.

No Ingredients Listed as a Carcinogen

IARC Monographs: No

NTP: No

OSHA: No

NFPA Hazard Ratings

Health - 2

Flammability - 1

Reactivity - 1

0 - Least

1 - Slight

2 - Moderate

3 - High

SECTION 7 - FIRST AID PROCEDURES

Skin Contact: Wash skin with soap and running water. If irritation occurs seek medical advice.

Ingestion: Give 1 to 2 glasses of water (200 to 500 ml) to dilute material. Do not induce vomiting. Vomiting should only be induced under the direction of a physician or poison control information centre. If spontaneous vomiting occurs, have victim lean forward with head down to avoid breathing of vomitus, rinse mouth and administer more water. OBTAIN MEDICAL ADVICE. Do not induce vomiting or give anything by mouth to an unconscious person.

Eye Contact: Flush eyes with running water for 20 minutes. Hold eyelids open during flushing. If irritation persists seek Medical Attention.



MATERIAL SAFETY DATA SHEET (MSDS)

SECTION 8 - PREVENTIVE MEASURES

Respiratory Protection: NIOSH/MSHA approved respirator, if required

Eye Protection: Chemical goggles or glasses

Skin Protection: Chemical resistant gloves

Other Personal Protective Equipment: None required

Engineering Controls: None required

Storage Requirements: Store in cool, dry, well ventilated area away from children

Storage Temperature: Min: 0 °C Max: 40 °C

SECTION 9 - ENVIRONMENTAL PROTECTION DATA

Spill and Leak Procedures: Stop leak, contain spill and transfer into waste container for disposal. Clean area with broom.

Waste Disposal: Dispose of empty container in household garbage. Dispose of spilt product as a Fertilizer, in accordance with Local, Provincial/State or Federal government regulations.

Environmental Effects: Do not contaminate local water supplies.

The information contained herein is considered accurate and offered only as a guide to the handling of this specific material. This information, does not relate to its use with any other material or product or in any process. No warranty, expressed or implied is made regarding the accuracy of the data or the performance of the material by Eco-Logical InnovationsTM. This Material Safety Data Sheet is valid for three years from Issue Date.

Prepared by: Technical Department

Issue Date: March 15, 2011