

MATERIAL SAFETY DATA SHEET**Date-Revised:** 08/13/2008**Revision No:** New MSDS**1. PRODUCT AND COMPANY IDENTIFICATION****PRODUCT NAME:** 20-20-20 General Purpose**PRODUCT DESCRIPTION:** Water Soluble Fertilizer**Distributor**

Terralink Horticulture Inc.
 464 Riverside Road
 Abbotsford, BC, Canada V2S 7M1
 Phone: 604-864-9044
 Fax: 604-864-8418

24 HR. EMERGENCY TELEPHONE NUMBERS

CEDA: (604) 540-4100
Chemical Spills: 1-800-663-3456

2. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS#	OSHA PEL	ACGIH TLV
Ammonium Phosphate	7722-76-1	None	None
Potassium Nitrate	7757-79-1	None	None
Urea	57-13-6	None	None
Iron Sulfate	7720-78-7	None	None ³ None
Boric Acid	10043-35-3	None	None
Copper EDTA	14025-15-1	None	None
Manganese EDTA	15375-84-5	None	None
Ammonium Molybdate	13106-76-8	5 mg (Mo)/m3	5 mg (Mo)/m3
Zinc EDTA	14025-21-9	None	None

COMMENTS: The ACGIH Threshold Limit Values (TLV) for nuisance (inert) dusts containing < 1% crystalline silica and no asbestos are: 10 mg/m3 inhalable particulates and 3 mg/m3 respirable particulate. The OSHA TLV is 15 mg/m3 total dust, 5 mg/m3 respirable fraction.

3. HAZARDS IDENTIFICATION**EMERGENCY OVERVIEW****IMMEDIATE CONCERNS:**

MAY BE HARMFUL IF SWALLOWED OR INHALED. MAY CAUSE SKIN AND EYE IRRITATION.

- Avoid contact with eyes, skin, and clothing.
- Wash thoroughly after handling.
- Avoid breathing dust.
- Do not swallow.

POTENTIAL HEALTH EFFECTS

EYES: May cause eye irritation.

SKIN: May cause skin irritation.

INGESTION: Possible nausea, vomiting, diarrhea.

INHALATION: Prolonged or excessive inhalation may cause respiratory tract irritation.

MEDICAL CONDITIONS AGGRAVATED: Skin abrasions, sores, or other pre-existing skin conditions. Inhalation of dust may aggravate asthma.

ROUTES OF ENTRY: Ingestion, skin, inhalation, and/or eyes.

4. FIRST AID MEASURES

EYES: If in eyes, hold eye open and rinse slowly and gently with water for 15 -20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing. Call a poison control center or doctor for treatment advice.

SKIN: Remove contaminated clothing. Flush affected area with water for 15 minutes. Wash affected area with mild soap and water. Seek medical attention if irritation develops or persists.

INGESTION: If swallowed, call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to by the poison control center or doctor. Do not give anything by mouth to an unconscious person.

INHALATION: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth -to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

COMMENTS: See product label for specific First Aid Measures. The above measures are the most conservative and would apply in the event a product label is not immediately available.

5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA: Water

HAZARDOUS COMBUSTION PRODUCTS: Thermal decomposition may produce ammonia as well as toxic oxides of carbon, nitrogen, and other metal oxides.

EXPLOSION HAZARDS: High airborne dust concentrations have the potential for explosions.

FIRE FIGHTING PROCEDURES: Evacuate area. Flood with water to cool containers. Apply water from a safe distance to avoid splattering of molten material. Wear self-contained breathing apparatus to fight large fires.

FIRE FIGHTING EQUIPMENT: Wear self-contained breathing apparatus to fight large fires.

FLASHPOINT: Decomposes on heating.

6. ACCIDENTAL RELEASE MEASURES

GENERAL PROCEDURES: Avoid dusting or misting condition during cleanup. If material is uncontaminated, collect and reuse as recommended for product. If contaminated, put in appropriate container and dispose according to local, provincial, or Federal regulations. Keep spills away from drinking water supplies. After spill cleanup, flush area with water. Read label

7. HANDLING AND STORAGE

HANDLING: See label. Wash hands with soap and water after handling product. Avoid container breakage. Avoid inhalation or contact with skin, eyes, or clothing. Do not contaminate water sources when disposing of equipment wash waters. Keep out of lakes, streams, or ponds. KEEP OUT OF REACH OF CHILDREN.

STORAGE: See label. KEEP OUT OF REACH OF CHILDREN. Avoid container breakage. Store in cool, dry area in closed container or package. Keep away from feed or foodstuffs.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION ENGINEERING CONTROLS: Use adequate ventilation to keep the

airborne concentrations of this material below the recommended exposure standard.

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Eye and face protection is not required for routine use. High airborne dust levels or mists of product dissolved in liquid may be irritating - use chemical goggles.

SKIN: None required for normal use. If prolonged or repeated use irritates skin, use natural rubber gloves.

RESPIRATORY: If airborne dust levels are high or irritation occurs, use NIOSH/MSHA approved respirator for dusts, mists, and fumes to reduce exposures to acceptable levels.

OTHER USE PRECAUTIONS: Running water or eye wash station should be available in case material gets in eyes.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Powder

ODOR: Slightly yeasty odor

COLOR: Aqua-blue

pH: 5.4 (10% solution)

SOLUBILITY IN WATER: 3 lbs 8 oz/gal

SPECIFIC GRAVITY: 45.1-47.2 lbs/ft³

10. STABILITY AND REACTIVITY

STABLE: YES

HAZARDOUS POLYMERIZATION: NO

CONDITIONS TO AVOID: Extreme heat. Contact with fuels and other organic or combustible materials. Active metals such as aluminum and magnesium. Strong reducing agents.

INCOMPATIBLE MATERIALS: Nitrates are incompatible with strong alkalis and reducing agents, active metals (such as aluminum and magnesium), ammonia, organic and combustible materials. Urea is incompatible with strong oxidizers, alkalis, sodium nitrite, and chlorine compounds (including bleach and similar household cleaning products).

11. TOXICOLOGICAL INFORMATION

CARCINOGENICITY:

IARC: No

NTP: No

OSHA: No

GENERAL COMMENTS: Little toxicology information is available for this product. Nitrate-containing substances are potential allergens. Prolonged or repeated contact with fertilizer may irritate eyes and skin. Inhalation of dust may irritate nose, throat, and lungs. Prolonged exposure may cause weakness, depression, headache, mental impairment, anemia, methemoglobinemia, and kidney injury. Ingestion of nitrates can cause gastrointestinal irritation, muscular weakness, and blue-tinged skin (cyanosis). Eye contact with urea powder may cause reversible corneal opacity along with irritation, tearing, and blinking as a foreign body in the eye. Skin contact with powdered urea may cause only mild irritation while ingestion may cause nausea, vomiting, and possible excitement and convulsions. Inhalation of high concentrations of metals (such as dusts containing manganese, molybdenum, copper, zinc, iron, etc.) over very long periods of time (several years, for example) may cause damage to the central nervous system or affect the liver, or kidney.

12. ECOLOGICAL INFORMATION ECOTOXICOLOGICAL

INFORMATION: Keep out of lakes, streams, or ponds.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Apply as fertilizer to field. If product is contaminated, dispose of in an approved landfill disposal facility, in accordance with applicable federal, state, and local regulations.

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME: Not DOT regulated.

OTHER SHIPPING INFORMATION: The transportation information shown may not apply to all shipping situations. Consult 49 CFR, or appropriate Dangerous Goods Regulations for additional description requirements (e.g., technical name) and mode-specific or quantity-specific shipping regulations.

15. REGULATORY INFORMATION GENERAL COMMENTS: Contact local authorities for

proper disposal of large quantities of unused fertilizer.

16. OTHER INFORMATION

REVISION SUMMARY New MSDS

NFPA CODES

HEALTH: 2 FIRE: 0 REACTIVITY: 1

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ADDITIONAL MSDS INFORMATION: NFPA Hazard Rating: 0=Least; 1=Slight; 2=Moderate; 3=High; 4=Severe.

GENERAL STATEMENTS: This document contains health, safety, and environmental information useful to emergency response agencies, health care providers, Suppliers, and workers/employees. It does not replace the precautionary language, use directions, or the storage and disposal information found on the product label.