

# MATERIAL SAFETY DATA SHEET

## 1. PRODUCT AND COMPANY IDENTIFICATION

**GP Bulb Food  
2-9-6**

**Manufacturer / Supplier**  
Terralink Horticulture Inc.  
464 Riverside Road,  
Abbotsford, BC. Canada  
V2S 7M1  
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**EMERGENCY CONTACT INFORMATION**  
CEDA Emergency Response Team (C.E.R.T)

**24 hour Telephone: 604-540-4100**  
**Chemical Spill: 1-800-663-3456**

## 2. HAZARDOUS INGREDIENTS

<u>Hazardous Ingredients</u>	<u>%</u>	<u>CAS#</u>	<u>TLV</u>	<u>LD<sub>50</sub></u> (oral)	<u>LC<sub>50</sub></u>
<b>Free Silica</b> (Silica Quartz)	1	14808-60-7	0.025mg/m <sup>3</sup>	N/AV	N/AV
<b><u>Non-hazardous Ingredients</u></b>					
<b>Mono-ammonium Phosphate</b>		7722-76-1	10 mg/m <sup>3</sup>	(rat) >5,000 mg/kg	N/AV
<b>46-0-0 Urea</b>		57-13-6	Not est.	(rat) 14,300mg/kg	N/AV
<b>Limestone</b>		471-34-1	not est.	(rat) 6450mg/kg	N/AV
<b>Muriate of Potash</b>					
Potassium Chloride		7447-40-7	3mg/m <sup>3</sup>	(rat) 2.6g/kg	N/AV
Sodium Chloride		7647-14-5	5mg/m <sup>3</sup>	(rat) 3g/kg	(rat) >42g/m <sup>3</sup>
<b>Limestone</b>		471-34-1	15mg/m <sup>3</sup>	6450mg/kg (rat)	N/AV

## 3. PHYSICAL DATA

**Physical state:** Solid  
**Specific gravity:** N/AV  
**Boiling point:** N/AV  
**Melting point:** N/AV  
**Appearance and Odour:** N/AV  
**Odour Threshold (ppm):** N/AV  
**Vapour Density:** N/AP  
**Vapour Pressure (mmHg):** Negligible  
**pH:** N/AV  
**Evaporation Rate:** solid  
**Coefficient of Water/Oil Distribution:** N/AV

## 4. FIRE AND EXPLOSION DATA

**Flammability under which conditions:** N/AV  
**Means of Extinction:** Does not burn. Use extinguishing media appropriate to the surrounding fire conditions  
**Flashpoint:** N/AP  
**Autoignition Temperature:** N/AP  
**Hazardous Combustion Products:** None  
**Upper Flammable Limit (% by volume):** N/AP

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**Lower Flammable Limit (% by volume):** N/AP

**Explosion Data – Sensitivity to Impact:** N/AV

**Explosion Data- Sensitivity to Static Discharge:** N/AV

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## 5. REACTIVITY DATA

**Chemical Stability:** Normally stable.

NOTE: silica combines chemically with most metallic oxides at elevated temperatures to form “glass”.

**Incompatibility with Other Substances:** STRONG OXIDIZING AGENTS (e.g. sodium hypochlorite or sodium chlorate) – causes decomposition to occur. Risk of fire and explosion. HYDROFLUORIC ACID – attacks silica.

MAGNESIUM – heating a mixture of powdered magnesium with slightly wet silica caused a violent explosion.

MANGANESE TRIFLUORIDE – a violent reaction may result. SODIUM – finely divided silica (sand) will often react with burning sodium

**Hazardous Decomposition Products:** None known

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## 6. TOXICOLOGICAL PROPERTIES

### Routes of Entry

**Skin Contact:** YES **Skin Absorption:** no **Eye Contact:** YES **Inhalation:** YES **Ingestion:** no

**Effects of Short-Term (Acute) exposure to Product:** In general, high concentrations of dust may cause coughing and mild, temporary irritation following short-term exposure. Quartz can have potentially serious respiratory effects following long-term inhalation (one year or more). See Chronic below.

**Effects of Long-Term (chronic) exposure to Product:** Repeated exposure may cause Silicosis, which usually develops gradually over 20 years or more of exposure. Prolonged or repeated exposure to fine airborne crystalline silica dust may cause severe scarring of the lungs. Inhalation of quartz has also been associated with a number of other, less well characterized harmful effects including effects on the kidney, liver, spleen and immune system disorders.

**Irritancy:** YES; contact with eyes / skin, respiratory system

**Sensitization:** No

### **Carcinogenicity:**

Silica quartz: The International Agency for Research on Cancer (IARC) has concluded that crystalline silica in the form of quartz or cristobalite from occupational sources should be classified as carcinogenic to humans. This conclusion was drawn on the basis of a relatively large number of human population studies that together provide sufficient evidence in humans for the carcinogenicity of inhaled crystalline silica in the form of quartz or cristobalite. In many of these studies, lung cancer risks were elevated and could not be explained by other factors.

**Reproductive Toxicity:** No

**Teratogenicity:** No

**Mutagenicity:** No

**Synergistic Products:** N/AV

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## 7. PREVENTIVE MEASURES

### **Personal Protective Equipment**

**Gloves:** Y **Respirator:** Y **Eye:** Y **Footwear:** N **Clothing:** Y **Other**

If Y above specify

**Gloves:** Rubber, Nitrile

**Eye:** Dust or splash-proof chemical safety goggles or face shield

**Respirator:** For operations where the exposure limit may be exceeded, a NIOSH/MSHA approved high efficiency particulate respirator is recommended.

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**Clothing:** Rubber or Nitrile gloves, long sleeve shirts and pants or coveralls, boots, and/or other resistant protective clothing. Have a safety eyewash fountain readily available in the work area.

**Engineering Controls:** Use local exhaust ventilation to control dust or mist. Supply sufficient replacement air to make up for air removed by exhaust system, process of personnel enclosure and control of process conditions.

**Leak and Spill Procedures:** **Do not** dry-seep crystalline silica. Whenever possible, wet down with a water spray to minimize the amount of dust or use a vacuum equipped with HEPA filters. Restrict access to area until completion of clean-up. Provide adequate personal protective equipment and ensure clean-up is conducted by trained personnel only. Ventilate area. Remove any reactive chemicals from the area.

**Waste Disposal:** According to local, provincial and federal government requirements

**Handling Procedures and Equipment:** Avoid inhalation and eye contact. Wear rubber or Nitrile gloves, chemical splash goggles and a NIOSH/MSHA approved high efficiency particulate respirator. Do not mix with incompatible materials. (see Section 5)

**Storage Requirements:** Keep in a cool, dry and well-ventilated area. Store away from incompatible materials

**Special Shipping Information:** Normal shipping procedures      **PIN:** N/AV

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## 8. **FIRST AID MEASURES**

**Inhalation:** Silica quarts and Terra Green are cancer hazards. If high airborne concentrations are present, take proper precautions to ensure your own safety before attempting to rescue (e.g. wear appropriate protective equipment). Remove source of contamination or have victim move to fresh air. Obtain medical advice immediately

**Ingestion:** Not normally ingested. If irritation or discomfort occurs, obtain medical advice immediately.

**Skin Contact:** Flush with lukewarm, gently flowing water until the chemical is removed. Remove contaminated clothing, shoes and leather goods (e.g. watchbands, belts, etc.). Obtain medical attention if pain or irritation develops or persists. Completely decontaminate clothing, shoes and leather goods before re-use or discard.

**Eye Contact:** Do not let victim rub eyes. Immediately flush eye(s) with lukewarm, gently running water for at least 20 minutes, while holding the eyelid(s) open. If irritation persists, obtain medical advice.

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9. PREPARATION INFORMATION

Prepared by:

Regulatory Affairs  
Terralink Horticulture Inc.

Telephone Number(s):  
604-864-9044  
800-661-4559

Date: December 23, 2008.



Class D, Div. 2 – Materials Causing Other Toxic Effects

**Disclaimer:**

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