

# MATERIAL SAFETY DATA SHEET

## TURF UNDERLAY

### 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

<b>Product Name</b>	Turf Underlay
<b>Product Code</b>	
<b>Other Names</b>	
<b>Product Use</b>	Media for under turf installation
<b>Supplier Name</b>	Tremline Pty Ltd trading as The Hills BARK BLOWER Corner Annangrove Rd and Sedger Rds Kenthurst NSW 2156
<b>Telephone Number</b>	02 9654 2288
<b>Emergency Telephone</b>	1300 BLOWIT

### 2. HAZARDS IDENTIFICATION

#### HAZARDOUS SUBSTANCE. NON DANGEROUS GOODS

Classified as hazardous according to the criteria of Safe Work Australia

**Hazards** Xn – Harmful

**Risk Phrases** R20 – Harmful by inhalation  
R42 – May cause sensitisation by inhalation.  
R43 – May cause sensitisation by skin contact

**Safety Phrases** S22 – Do not breathe dust.  
S36/37/39 – Wear suitable protective clothing, gloves and eye/face protection.  
S38 – In case of insufficient ventilation, wear suitable respiratory equipment

### 3. COMPOSITION/ INFORMATION ON INGREDIENTS

Ingredient (common name)	CAS Number	Percentage
Clinker ash (which consist mostly of silicon dioxide present in two forms: amorphous, which is rounded and smooth, and crystalline, which is sharp, pointed and hazardous, aluminium oxide and iron oxide)	Not Applicable	50%
Sand – Crystalline Silica (quartz)	14808-60-7	10%
Compost, mulches and other organic gardening material	Not Applicable	15%
Raw pine bark	Not Applicable	10%
Composted Pine Bark	Not Applicable	15%

#### 4. FIRST AID MEASURES

<b>Inhalation</b>	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention if symptoms persist.
<b>Ingestion</b>	If swallowed immediately rinse mouth with water. Give plenty water to drink. Never give anything by mouth to an unconscious person. Seek immediate medical attention.
<b>Skin</b>	If skin or hair contact occurs, immediately remove contaminated clothing and wash skin and hair thoroughly with soap and plenty of water. Seek medical attention if symptoms persist. Launder protective clothing before re-use.
<b>Eyes</b>	If in eyes, hold eyelids apart and flush the eye continuously with large amounts of water for at least 15 minutes. Seek medical attention if symptoms persist.

#### 5. FIRE FIGHTING MEASURES

<b>Suitable Extinguishing Media</b>	For major fires call the Fire Brigade. Ensure that an escape path is available from any fire. Water Spray
<b>Hazardous Combustion Products</b>	No information available
<b>Fire Fighting Equipment</b>	Wear Safe Work Australia approved self-contained breathing apparatus and full protective clothing.
<b>Unusual Fire or Exposure Hazards</b>	Non Combustible Material
<b>Hazchem Code</b>	Not Allocated

#### 6. ACCIDENTAL RELEASE MEASURES

<b>Spills</b>	In the event of a major spill, prevent spillage from entering drains or water courses. Wear full protective clothing including eye/face protection, P1 or P2 particulate respirator (dust mask) and impervious elbow-length gloves. Evacuate general area and deny access to unnecessary and unprotected personnel. Spilled area should be wet down with water to reduce dust generation before cleanup. If unable to reuse or recycle, dispose of waste materials according to applicable local and state government regulations.
---------------	--

#### 7. HANDLING AND STORAGE

<b>Handling</b>	Use of safe work practices are recommended to avoid eye or skin
-----------------	---

contact and inhalation. Observe good personal hygiene, including washing hands before eating. Provide adequate ventilation. Avoid inhaling dust which can be generated during processing, handling and storage. Use a P1 or P2 particulate respirator (dust mask).

**Storage**

Store in a cool, dry area. Avoid generating and inhaling dust.

**8. EXPOSURE CONTROL/ PERSONAL PROTECTION**

**Exposure Standards  
(Safe Work Australia)**

**Aluminium oxide:**

TWA: - ppm / 10 mg/m<sub>3</sub>

STEL: - ppm / - mg/m<sub>3</sub>

**Fumed silica (respirable dust):**

TWA: - ppm / 2 mg/m<sub>3</sub>

STEL: - ppm / - mg/m<sub>3</sub>

**Quartz (crystalline silica):**

TWA: - ppm / 0.1mg/m<sub>3</sub>

STEL: - ppm / - mg/m<sub>3</sub>

**Titanium dioxide:**

TWA: - ppm / 10 mg/m<sub>3</sub>

STEL: - ppm / - mg/m<sub>3</sub>

**Nickel (metal):**

TWA: - ppm / 1mg/m<sub>3</sub>

STEL: - ppm / - mg/m<sub>3</sub>

**Nickel (soluble compounds as Ni)**

TWA: - ppm / 0.1 mg/m<sub>3</sub>

STEL: - ppm / - mg/m<sub>3</sub>

**Engineering Controls**

Local exhaust ventilation is recommended when vapours can be released in excess of established airborne exposure limits.

**Respiratory Protection**

If exposed to dust wear a Safe Work Australia approved P1 or P2 particulate respirator (dust mask). See Australian Standards AS/NZS 1715 and 1716 for more information.

**Eye Protection**

Non-fogging dust resistant goggles or safety glasses. See Australian Standards AS 1336 and AS/NZS 1337 for more information.

**Skin Protection**

Wear standard duty gloves, loose, comfortable protective clothing and boots. See Australian Standards AS 2161 and 2919 and AS/NZS 2210 for more information.

**Hygienic Practices**

Food, beverages and tobacco products should not be stored or consumed where this material is in use. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use. Provide eyewash fountains and safety showers in close proximity to points of potential exposure.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	Brown to grey blend of natural organic and mineral substances
<b>Odour</b>	Non specific earthy odour
<b>Solubility in Water</b>	Insoluble
<b>pH</b>	No information available
<b>Boiling Point</b>	Not applicable
<b>Melting Point</b>	Not applicable
<b>Vapour Pressure</b>	Not applicable
<b>Specific Gravity (H<sub>2</sub>O=1)</b>	No information available
<b>Evaporation Rate (H<sub>2</sub>O=1)</b>	Not applicable
<b>Flash Point (Closed Cup)</b>	Not applicable
<b>Flammable Limit – Lower</b>	Not applicable
<b>Flammable Limit – Upper</b>	Not applicable
<b>Auto-ignition Temperature</b>	Not applicable

## 10. STABILITY AND REACTIVITY

<b>Chemical Stability</b>	Stable.
<b>Incompatible Materials</b>	No information available
<b>Hazardous Decomposition Products</b>	No information available
<b>Hazardous Polymerization</b>	Will not occur.
<b>Conditions to Avoid</b>	No information available

## 11. TOXICOLOGY INFORMATION

<b>Clinker</b>	<p><b>Clinker ash</b> contains crystalline silica. Inhaling dust generated during handling may cause scarring of the lung (silicosis), lung cancer and chronic bronchitis. It also may increase the risk of scleroderma (thickening of the connective tissue) and kidney disease (increased prevalence of renal abnormalities and end stage – renal disease – glomerulonephritis).</p> <p><b>Clinker ash</b> also contains environmental toxins in significant amounts, including arsenic (43.4 ppm); barium (806 ppm); beryllium (5 ppm); boron (311 ppm); cadmium(3.4 ppm); chromium (136 ppm); chromium VI (90 ppm); cobalt (35.9 ppm); copper (112 ppm); fluorine (29 ppm); lead (56 ppm); manganese (250 ppm); nickel (77.6 ppm); selenium (7.7 ppm); strontium (775 ppm); thallium (9 ppm); vanadium (252 ppm); and zinc (178 ppm).</p> <p><b>Compost (mulch)</b> is made from organic materials, including composted pine bark, and contains living micro-organisms, including bacteria, fungi and protozoa. May also contain mineral and fertiliser additives. Inhalation of dust and/or liquid mists may irritate, inflame or sensitise the nose, throat and lungs resulting in illnesses ranging from hay fever or asthma, to pneumonia (eg Legionnaire's disease) I or pneumonia-like illnesses. Direct contact with this material or its dust and/or liquid mists (bio-aerosols) may cause skin irritation (dermatitis), and skin or eye infection or irritation.</p>
<b>Routes of Exposure</b>	Inhalation, ingestion, eye and skin



EST. 1997



**The Hills BARK BLOWER**  
**1300 BLOWIT**  
[www.barkblower.com.au](http://www.barkblower.com.au)  
*job sites made easy*

**Acute Health Effects**

Inhalation: May cause irritation, inflammation and sensitisation of the nose, throat and lungs.  
 Ingestion: Unlikely under normal conditions, but swallowing this product will result in abdominal discomfort and increase the risk of gastro-intestinal infections.  
 Eye: May cause irritation resulting in redness and watering or even eye infection.  
 Skin: May cause irritation and in some people may lead to skin sensitisation, dermatitis or skin infection.

**Chronic Health Effects**

Repeated inhalation of dust (bio-aerosols) from these products may result in respiratory irritation, inflammation or sensitisation resulting in illnesses ranging from hay fever and asthma to pneumonia (eg Legionnaire's disease) and pneumonia-like illnesses.  
 It may also cause scarring of the lung (silicosis), lung cancer, chronic bronchitis and increase the risk of scleroderma (thickening of the connective tissue) and kidney disease.  
 All people working with these and other landscaping and horticultural products should ensure that they are adequately protected from tetanus.

**Existing Conditions Aggravated by Exposure**  
**Carcinogenicity**

Pre-existing respiratory diseases.  
 The International Agency for Research on Cancer (IARC) has classified crystalline silica as a Type 1 carcinogen - Carcinogenic to humans, based on sufficient evidence in humans and animals.

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity** No information available.  
**Mobility** No information available.

**13. DISPOSAL CONSIDERATIONS**

**Disposal methods and containers** Dispose according to applicable local and state government regulations.  
**Special precautions for landfill or incineration** Please consult your state Land Waste Management Authority for more information.

**14. TRANSPORT INFORMATION**

Not classified as a dangerous good according to the Australian Code for the Transport of Dangerous goods by road or rail.  
**UN Number** Not applicable  
**Proper Shipping Name** Not applicable  
**Dangerous Goods Class** Not applicable  
**Hazchem Code** Not applicable  
**Packing Group** Not applicable  
**Special Precautions** Not applicable

**15. REGULATORY INFORMATION**



The Hills BARK BLOWER  
1300 BLOWIT  
[www.barkblower.com.au](http://www.barkblower.com.au)  
*job sites made easy*

Silicon dioxide is listed in the Australian Inventory of Chemical Substances (AICS).

## 16. OTHER INFORMATION

<b>Last Revision of MSDS</b>	Rev 2.0 04/01/2018)
<b>Prepared by</b>	Tremline Pty Ltd trading as The Hills Bark Blower
<b>Abbreviations Used</b>	IARC: International Agency for Research on Cancer NTP: National Toxicology Program (U.S.) OSHA: Occupational Safety and Health Administration (U.S.) STEL: Short term exposure limit TWA: Time weighted average
<b>Emergency Contacts</b>	<b>02 9654 2288</b>
<b>Tremline Pty Ltd trading as The Hills Bark Blower</b>	<b>1300 BLOWIT</b>
<b>Tremline Pty Ltd trading as The Hills Bark Blower – Emergency Number</b>	<b>000</b>
<b>Police and Fire Brigade</b>	<b>13 11 26</b>
<b>Poisons Information Centre</b>	

The information contained in this material safety data sheet is provided in good faith and is believed to be accurate at the date of issuance. Tremline Pty Ltd trading as The Hills Bark Blower makes no representation of the accuracy or comprehensiveness of the information and to the full extent allowed by law excludes all liability for any loss or damage related to the supply or use of the information in this material safety data sheet. The user is cautioned to make their own determinations as to the suitability of the information provided to the particular circumstances in which the product is used.

This MSDS is prepared in accord with the Safe Work Australia document "National Code of Practice for the Preparation of Material Safety Data Sheets" 2nd Edition [NOHSC:2011(2003)]