

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name	Turf Underlay
Product Code	
Other Names	Turf Soil
Product Use	Media soil for under turf, fill in areas in some lawns
Supplier Name	Tremline Pty Ltd trading as Scapeworks Australia Corner Annangrove Rd and Sedger Rds. Kenthurst NSW 2156
Telephone Number	02 9654 2288
Emergency Telephone	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
Compost, mulches and other organic gardening material	Not Applicable	40%
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	20%
Raw pine bark	Not Applicable	10%
Fine Sand	Not Applicable	30%

4. FIRST AID MEASURES

- Inhalation** - If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention if symptoms persist.
- Ingestion** - 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.
- Skin** - 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.
- Eyes** - 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

For major fires call the Fire Brigade. Ensure that an escape path is available from any fire.

Suitable Extinguishing	Water Spray
Media Hazardous Combustion	No information available Products Fire Fighting Equipment Wear Safe Work Australia approved self-contained breathing apparatus and full protective clothing.
Unusual Fire or Explosion Hazards	Non-Combustible Material
Hazchem Code	Not Allocated

6. ACCIDENTAL RELEASE MEASURES

Spills	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 clean-up. If unable to reuse or recycle, dispose of waste materials according to applicable local and state government regulations.
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7. HANDLING AND STORAGE

Handling	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.
Stockpiles	Stockpiles are to be maintained and baddered 1:4 Ratio on all sides and piles kept moist to limit dust.

8. EXPOSURE CONTROL/ PERSONAL PROTECTION

Exposure Standards (Safe Work Australia)	<p>Aluminium oxide: TWA: - ppm / 10 mg/m³ STEL: - ppm / - mg/m³</p> <p>Fumed silica (respirable dust): TWA: - ppm / 2 mg/m³ STEL: - ppm / - mg/m³</p> <p>Quartz (crystalline silica): TWA: - ppm / 0.1mg/m³ STEL: - ppm / - mg/m³</p> <p>Titanium dioxide: TWA: - ppm / 10 mg/m³ STEL: - ppm / - mg/m³</p> <p>Nickel (metal): TWA: - ppm / 1mg/m³ STEL: - ppm / - mg/m³</p> <p>Nickel (soluble compounds as Ni) TWA: - ppm / 0.1 mg/m³ STEL: - ppm / - mg/m³</p>
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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

Appearance

Brown to grey blend of natural organic and mineral substances

Odour

Non specific earthy odour

Solubility in Water

Insoluble

pH

No information available

Boiling Point

Not applicable

Melting Point

Not applicable

Vapour Pressure

Not applicable

Specific Gravity (H2O=1)

No information available

Evaporation Rate (H2O=1)

Not applicable

Flash Point (Closed Cup)

Not applicable

Flammable Limit – Lower

Not applicable

Flammable Limit – Upper

Not applicable

Auto-ignition Temperature

Not applicable

10. STABILITY AND REACTIVITY

Chemical Stability

Stable.

Incompatible Materials

No information available

Hazardous Decomposition Products	No information available
Hazardous Polymerization Conditions to Avoid	Will not occur. No information ava

11. TOXICOLOGY INFORMATION

Clinker	<p>Clinker ash 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>Clinker ash 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>Compost (mulch) 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>
Routes of Exposure	Inhalation, ingestion, eye and skin
Acute Health Effects	<p>Inhalation: abdominal discomfort and increase the risk of gastro-intestinal infections.</p> <p>Ingestion: May cause irritation resulting in redness and watering or even eye infection.</p>
Chronic Health Effects	<p>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.</p> <p>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.</p> <p>All people working with these and other landscaping and horticultural products should ensure that they are adequately protected from tetanus.</p>
Existing Conditions Aggravated by Exposure	Pre-existing respiratory diseases.
Carcinogenicity	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

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

16. OTHER INFORMATION

Last Revision of MSDS Rev 2.0 04/01/2018)
Prepared by MSDS.COM.AU Pty Ltd www.msds.com.au
 Revised by Tremline Pty Ltd trading as Scapeworks Australia

Abbreviations Used 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

Emergency Contacts **02 9654 2288**
Tremline Pty Ltd trading as Scapeworks Australia **1300 BLOWIT**
Tremline Pty Ltd trading as Scapeworks Australia – Emergency Number
Police and Fire Brigade **000**
Poisons Information Centre **13 11 26**