

MATERIAL SAFETY DATA SHEET

Date of Issue: January 01, 2021

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Material name Leonardite Dry Humate
Synonym(s) Humic Acid * Lignite * Leonardite
CAS # 68525-81-5
Supplier Greenway Turf Solutions A.B.N 49 600 618 657
 Address: Unit 3 / 2 Ant Rd, Yatala 4207
 Telephone Number: 0733827187
 Emergency Telephone Number: +61 488 006 570
 Fax Number: (07) 3315 4575

2. HAZARDS IDENTIFICATION

This substance has not been classified as hazardous according to criteria of Worksafe Australia

Risk phrase(s) None.

Safety phrase(s) None.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS #	Percent
LEONARDITE	68525-81-5	100
Constituents	CAS #	Percent
Quartz	14808-60-7	<= 6

Composition comments The purity of the product is 100% w/w. Impurities are not applicable for a UVCB substance.

4. FIRST-AID MEASURES

Inhalation: Move to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Call a physician if symptoms develop or persist.

Skin contact: Wash off with soap and water. Get medical attention if irritation develops or persists.

Eye contact: Flush eyes with water as a precaution. Get medical attention if irritation develops or persists.

Ingestion: No need for first aid is anticipated if material is swallowed. If ingestion of a large amount does occur, seek medical attention.

General advice: If you feel unwell, seek medical advice (show the label where possible).

Notes to physician: Provide general supportive measures and treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Use any media suitable for the surrounding fires. Dry chemical, CO₂, water spray or regular foam.

Unusual fire & explosion hazards

Dust accumulation from this product may present an explosion hazard in the presence of an ignition

source.

Special protective equipment for fire-fighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. In the event of fire, wear self-contained breathing apparatus.

Hazchem Code

None.

Hazardous combustion products

Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Wear a dust mask if dust is generated above exposure limits.

Environmental precautions

No special environmental precautions required. Prevent further leakage or spillage if safe to do so.

Containment procedures

Eliminate all sources of ignition or flammables that may come into contact with a spill of this material.

Methods for cleaning up

Avoid the generation of dusts during clean-up. Collect dust or particulates using a vacuum cleaner with a HEPA filter. Flush area with water to remove trace residue.

7. HANDLING AND STORAGE

Handling

Keep formation of airborne dusts to a minimum. Provide appropriate exhaust ventilation at places where dust is formed. In case of insufficient ventilation, wear suitable respiratory equipment. Keep this product from heat, sparks, or open flame.

Storage

Keep the container dry. Keep in a cool, well-ventilated place. Guard against dust accumulation of this material.

8. PERSONAL PROTECTION

Respiratory protection

Use a particulate filter respirator for particulate concentrations exceeding the Occupational Exposure Limit.

Eye protection

Wear dust goggles. Eye wash fountain is recommended.

Skin and body protection

No special protective equipment required. Normal work clothing (long sleeved shirts and long pants) is recommended.

Environmental exposure controls

No special measures required

Hygiene measures

Use good industrial hygiene practices in handling this material.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Not available.	
Physical state	Solid.	
Form	Powder.	
Colour	Brown to black.	
Odour	Not available.	
Odour threshold	Not available.	
pH	Not available.	
Vapour pressure	Not available.	
Vapour density	Not available.	
Boiling point	Not available.	
Melting point/freezing point	Not available.	
Solubility (water)	Not available.	
Specific gravity	Not available.	
Flash point	Non-flammable	
Flammability limits in air, upper, % by volume		Not available.
Flammability limits in air, lower, % by volume		Not available.
Auto-ignition temperature	Not available.	

10. STABILITY AND REACTIVITY

Chemical stability	Stable at normal conditions.
Conditions to avoid	Heat, flames and sparks.
Materials to avoid	Strong oxidising agents.

Hazardous decomposition products

Upon decomposition, this product emits oxides of sulfur, carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

Hazardous polymerisation	Will not occur.
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11. TOXICOLOGICAL INFORMATION

Toxicological data	Species	Test results
Constituents		
Quartz (CAS 14808-60-7)		
Acute		
Oral		
LD50	Rat	500 mg/kg

Routes of exposure

Inhalation.

Chronic toxicity

In 1997, IARC (the International Agency for Research on Cancer) concluded that crystalline silica inhaled from occupational sources can cause lung cancer in humans. However in making the overall evaluation, IARC noted that "carcinogenicity was not detected in all industrial circumstances studied. Carcinogenicity may be dependent on inherent characteristics of the crystalline silica or on external factors affecting its biological activity or distribution of its polymorphs." (IARC Monographs on the

evaluation of the carcinogenic risks of chemicals to humans, Silica, silicates dust and organic fibres, 1997, Vol. 68, IARC, Lyon, France.)

In June 2003, SCOEL (the EU Scientific Committee on Occupational Exposure Limits) concluded that the main effect in humans of the inhalation of respirable crystalline silica dust is silicosis. "There is sufficient information to conclude that the relative risk of lung cancer is increased in persons with silicosis (and, apparently, not in employees without silicosis exposed to silica dust in quarries and in the ceramic industry). Therefore, preventing the onset of silicosis will also reduce the cancer risk..." (SCOEL SUM Doc 94-final, June 2003)

According to the current state of the art, worker protection against silicosis can be consistently assured by respecting the existing regulatory occupational exposure limits. Occupational exposure to nuisance dust (total and respirable) and respirable crystalline silica should be monitored and controlled.

Carcinogenicity

IARC Monographs. Overall Evaluation of Carcinogenicity

Quartz (CAS 14808-60-7) 1 Carcinogenic to humans.

12. ECOLOGICAL INFORMATION

Ecotoxicity

This material is not expected to be harmful to aquatic life.

Environmental effects

Based on the physical properties of this product, significant environmental persistence and bioaccumulation would not be expected.

13. DISPOSAL CONSIDERATIONS

Disposal instructions

Dispose in accordance with all applicable regulations.

14. TRANSPORT INFORMATION

ADG

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not available.

15. REGULATORY INFORMATION

National regulations

Australia HVIC: Listed substance

Quartz (CAS 14808-60-7) Listed.

Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia Australian	Inventory of Chemical Substances (AICS)	Yes

16. OTHER INFORMATION

Further information

This safety datasheet only contains information relating to safety and does not replace any product information or product specification.

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The manufacturer expressly does not make any representations, warranties, or guarantees as to its accuracy, reliability or completeness nor assumes any liability, for its use. It is the user's responsibility to verify the suitability and completeness of such information for each particular use. Third party materials: Insofar as materials not manufactured or supplied by this manufacturer are used in conjunction with, or instead of this product, it is the responsibility of the customer to obtain, from the manufacturer or supplier, all technical data and other properties relating to these and other materials and to obtain all necessary information relating to them. No liability can be accepted in respect of the use of this product in conjunction with materials from another supplier. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.