



## MATERIAL SAFETY DATA SHEET

Freshwater Diatomite  
 Not classified as a hazardous substance according to the criteria of NOHSC

### 1. PRODUCT AND COMPANY IDENTIFICATION

<b>Product Name:</b>	Essential Soil Conditioner
<b>Manufacturer:</b>	Diatomite Ozzy Solutions Pty Ltd
<b>Address:</b>	102 O'Sullivan Beach Rd, Lonsdale SA 5160
<b>Telephone Number:</b>	0427 890 181
<b>Chemical Name:</b>	Diatomaceous Earth, Calcined
<b>Chemical Family</b>	Silica
<b>Material Use:</b>	Soil Amendment & Growing Medium
<b>Date of Preparation:</b>	September 1st, 2019

### 2. HAZARDS IDENTIFICATION

<b>Emergency Overview Appearance/Colour/Odour:</b>	A buff to off-white, low density granular product. There is no distinctive odour.
<b>OSHA Regulatory Status:</b>	This material is considered hazardous by the OSHA Hazard Communication Standard
<b>Potential Health Effects:</b>	See below and Section 11 for additional information
<b>Likely Routes of Exposure:</b>	See below
<b>Eye:</b>	May cause irritation (tear formation and redness) if dust gets in eyes.
<b>Skin:</b>	Not absorbed by the skin, but may cause dryness if prolonged exposure.
<b>Ingestion:</b>	Ingestion of small to moderate quantities is not considered harmful, but may cause irritation of the mouth, throat and stomach.
<b>Inhalation:</b>	Acute inhalation can cause dryness of the nasal passage and lung congestion, coughing and general throat irritation. Chronic inhalation of dust should be avoided.
<b>Chronic Effects:</b>	

### **3. COMPOSITION/INFORMATION ON INGREDIENTS**

<b>Ingredient Identification</b>	<b>Approximate Concentration %</b>	<b>C.A.S. Numbers</b>	<b>EINECS</b>	<b>R Factors</b>
Diatomaceous Earth, Calcined (kieselguhr)	100%	91053-39-3	293-303-4	
Crystalline Silica (Cristobalite)	< 1%	14464-46-1	238-455-4	R48/20
Crystalline Silica (Quartz)	< 1%	14808-60-7	238-78-4	R48/20

### **4. FIRST AID MEASURES**

<b>Eye:</b>	Flush eyes with generous quantities of water or eye rinse solution. Consult physician if irritation persists.
<b>Skin:</b>	Use moisture renewing lotions if dryness occurs.
<b>Ingestion:</b>	Drink generous amounts of water to reduce bulk and drying effects.
<b>Inhalation:</b>	Remove to fresh air. Blow nose to evacuate dust.
<b>Note to Physicians:</b>	No special notes.
<b>Antidote:</b>	Not applicable

### **5. FIRE FIGHTING MEASURES**

<b>Flammability:</b>	This material is not flammable.
<b>Extinguishing Media:</b>	Not applicable, the material is not flammable.
<b>Fire-Fighting Procedures:</b>	Not applicable, the material is not flammable.
<b>Protective Equipment:</b>	Not applicable, the material is not flammable.
<b>Hazardous Combustion Products:</b>	Not applicable, the material does not combust.
<b>Specific Physical And Chemical Hazards:</b>	Not applicable, the material is not flammable.
<b>Explosion Data:</b>	Not applicable, the material is not explosive.

### **6. ACCIDENTAL RELEASE MEASURES**

<b>Personal Precautions:</b>	If dust is present, use respirator fitted with particulate filter as specified in Section 8. Protect eyes with goggles.
<b>Environmental Precautions:</b>	This material is not a significant environmental concern.
<b>Containment and Clean-up:</b>	Vacuum clean spillage, wet sweep or wash away. Avoid creating dust.

## 7. HANDLING AND STORAGE

<b>Handling:</b>	Minimize dust generation. Avoid contact with eyes. Avoid breathing dust. Repair or dispose of broken bags.
<b>Storage:</b>	Store in a dry place to maintain packaging integrity and product quality. Do not store near hydrofluoric acid. Observe all label precautions and warnings.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Component	OSHA PEL	ACGIH TLV	MSHA PEL	NIOSH REL
Diatomaceous Earth, Calcined (kieselguhr)	See below	See below	See below	See below
Crystalline Silica (Quartz)	0.050 mg/m <sup>3</sup>	0.025 mg/m <sup>3</sup>	10/(% respirable crystalline silica +2)	0.050 mg/m <sup>3</sup>
Crystalline Silica (Cristobalite)	0.050 mg/m <sup>3</sup>	0.025 mg/m <sup>3</sup>	0.5*10/(% respirable crystalline silica +2)	0.050 mg/m <sup>3</sup>
<b>Engineering Controls:</b>	Local – Control dust within recommended TLV/PEL. Refer to ACGIH publication “Industrial Ventilation” or similar publications for design of ventilation systems.			
<b>Personal Protective Equipment:</b>	See below			
<b>Eye / Face:</b>	Goggles to protect from dust			
<b>Skin:</b>	No special equipment is needed.			
<b>Respiratory:</b>	Respirators fitted with filters certified to standard 42CFR84 under series N95 should be worn when dust is present. If the dust concentration is less than ten (10) times the Permissible Exposure Limit (PEL) use a quarter or half-mask respirator with a N95 Dust filter or a single use dust mask rated N95. If dust concentration is greater than ten (10) times and less than fifty (50) times the PEL, a full-face piece respirator fitted with replaceable N95 filters is recommended. If dust concentration is greater than fifty (50) and less than two hundred (200) times the PEL use a power air-purifying (positive pressure) respirator with a Replaceable N95 filter. If dust concentration is greater than two hundred (200) times the PEL use a type C, supplied air respirator (Continuous flow, positive pressure), with full face piece, hood or helmet.			
<b>General Hygiene:</b>	Avoid breathing dust. Avoid contact with eyes. Wash hands after handling and before eating or drinking.			
For sampling silica dusts refer to NIOSH Analytical Method 7500 or OSHA method ID 142				

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance, colour:</b>	Buff to off white granules	Odour	Odourless
<b>Physical State:</b>	Solid	pH ( 10% Suspension )	5.0 - 7.0
<b>Vapour Pressure:</b>	Not applicable	<b>Vapour Density:</b>	Not applicable
<b>Boiling Point:</b>	Not applicable	<b>Melting Point:</b>	> 1300 oC
<b>Flash Point:</b>	Not applicable	<b>Flammability:</b>	Not applicable
<b>Flammability Limits:</b>	Not applicable	<b>Auto ignition Temperature:</b>	Not applicable
<b>Decomposition Temperature:</b>	> 1300 °C	<b>SPEC. Gravity / REL. Density:</b>	2.2
<b>Evaporation Rate:</b>	Not applicable	<b>COEFF. - Water / Oil:</b>	Not applicable
<b>Odour Threshold:</b>	Not applicable	<b>Solubility – Water:</b>	< 1 %
<b>Partition Coefficient:</b>	Not applicable		

## 10. STABILITY AND REACTIVITY

<b>Chemical Stability:</b>	Material is stable.
<b>Physical Hazards:</b>	Material is not reactive.
<b>Conditions to Avoid:</b>	Not applicable
<b>Incompatible Materials:</b>	Hydrofluoric acid. Products containing silica may react violently with hydrofluoric acid.
<b>Hazardous Decomposition Products:</b>	Not applicable

## 11. TOXICOLOGICAL INFORMATION

<b>Chronic Effects /Carcinogenicity:</b>	<p>This granular product can contain respirable dust, composed primarily of amorphous silica but possibly with a small fraction of Crystalline silica. Amorphous silica is not classifiable as carcinogenic to humans. Crystalline silica, when inhaled as respirable dust, Has been classified as carcinogenic to humans over prolonged and sustained exposure. Long-term inhalation of respirable Crystalline silica may contribute to the respiratory disease “silicosis”, a non-cancerous lung disease. In a 1997 monograph (Volume 68, “Silica”), the International Agency for Research on Cancer (IARC) concluded that overall the epidemiological findings support increased risk of lung cancer from inhaled crystalline silica resulting from occupational exposure (classified in Group 1), while there was inadequate evidence in humans for the carcinogenicity of amorphous silica (classified in Group 3).</p>
<b>Route of Exposure:</b>	Inhalation (chronic)
<b>Symptoms:</b>	Not available
<b>LD50:</b>	Not available

<b>Immediate And Delayed Effects:</b>	No immediate effects. See CHRONIC EFFECTS for potential long-term effects when prolonged exposure to levels of crystalline Silica in excess of OSHA PEL and ACGIH TLV.
<b>Corrosiveness, Sensitization, Irritancy:</b>	Not available
<b>Reproductive Toxicity:</b>	Not available
<b>Teratogenicity, Mutagenicity:</b>	Not available
<b>Toxicologically Synergistic Products:</b>	Inhaled smoke from tobacco products (chronic).

## 12. ECOLOGICAL INFORMATION

<b>Characteristics:</b>	Non-biodegradable, inert, with little potential for bioaccumulation.
<b>Possible Effects:</b>	Diatomaceous earth products have shown some efficacy as a natural insecticide, but otherwise have no demonstrated toxicity in Regards to aquatic or terrestrial life.

## 13. DISPOSAL CONSIDERATIONS

<b>Waste Disposal:</b>	If this material as supplied becomes a waste, use solid waste disposal common to landfill type operations or in slurry to sumps. Not considered a hazardous waste under RCRA (40CFR Part 261).
<b>Packaging Disposal:</b>	Dispose of in accordance with applicable laws and regulations, typically solid waste disposal common to landfill type operations.

## 14. TRANSPORT INFORMATION

<b>Basic Shipping Information:</b>	DOT shipping classification 55 (no restrictions). Technical name is "Diatomaceous Earth".
<b>Additional Information:</b>	No special requirements or placarding necessary.

## 15. REGULATORY INFORMATION

International:	
<b>IARC:</b>	"Inhaled crystalline silica from occupational sources" – Group 1 – is classified in IARC as a carcinogen.
<b>WHMIS Classification:</b>	Because it is naturally-occurring, and because the respirable crystalline silica content of this product is < 0.1%, it is not regulated by WHMIS

<b>WHMIS Ingredient Disclosure List:</b>	Included for disclosure at 1% or greater. Meets criteria for disclosure at 0.1% or greater.
<b>EEC Label (Risk/Safety/Phrases):</b>	R48/20, S22, S38

## **16. OTHER INFORMATION**

<b>Original Issue Date:</b>	September 1st, 2019
<b>Revision Date:</b>	September 1st, 2019
<b>Revision No:</b>	1

## **CONTACT POINT**

Further information can be obtained from the supplier, website or the following telephone numbers:

<b>Website:</b>	<a href="http://www.deozzy.com">www.deozzy.com</a>
<b>Phone Number:</b>	0427 890 181