

*EcoSun*

## 1. Identification

Product identifier:	EcoSun
Synonym:	None
Company product code or Supplier code:	N/A
Product code:	NC
RSA Reg. No. (Act No. 36 of 1947):	Not applicable
Supplier:	Andermatt Madumbi (Pty) Ltd Unit 19, Midway Square, 1 Prospect Place, Howick, KwaZulu-Natal 3245, South Africa Telephone: +27 (0) 33 342 3984 (09:00 to 16:00) Email address (technical): support@anderlatt.co.za
Recommended use:	Sunscreen
Restrictions on use:	Do not use for any other purpose than described on the product label
Emergency numbers:	<b>+24 Hr Transport / Spill emergency no:</b> (Hazcall24) +27 86 044 4411 Griffon Poison Information Centre +27 82 446 8946 <b>Poisoning Emergency telephone numbers:</b> Griffon Poison Information Centre +27 82 446 8946 Poisons Information Centre +27 861 555 777

## 2. Hazards identification

EcoSun is a solid substance (powder).

Classification according to GHS:	Skin corrosion/irritation	Category 2
	Serious eye damage/eye irritation	Category 2
	Carcinogenicity	Category 2
	Specific target organ toxicity, repeated exposure	Category 2

Signal word: WARNING

Hazard statements:	CAUSES SKIN IRRITATION	H315
	CAUSES SERIOUS EYE IRRITATION	H319
	SUSPECTED OF CAUSING CANCER	H351
	MAY CAUSE DAMAGE TO THE LUNGS THROUGH PROLONGED OR REPEATED EXPOSURE (INHALATION)	H373

Hazard symbols:



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Precautionary statements:

Obtain, read, and follow all safety instructions before use.	P203
Wear protective gloves/protective clothing/eye protection/respiratory protection.	P280
Do not eat, drink, or smoke when using this product.	P270
Store locked up in a well-ventilated place. Keep container tightly closed.	P403+P233+P405
Use only outdoors or in a well-ventilated area.	P271
Do not breathe dust.	P260
Wash hands and face thoroughly after handling. Do not touch eyes.	P264+P265
IF ON SKIN: Wash with plenty of water.	P302+P352
If skin irritation occurs: Get medical help.	P337+P317
Take off contaminated clothing and wash it before use.	P362+P364
IF IN THE EYES: Rinse cautiously with water for several minutes.	P305+P351
Remove contact lenses, if present and easy to do. Continue rinsing.	P338
If eye irritation persists: Get medical help.	P337+P317
If exposed or concerned, get medical advice	P318
Get medical help if you feel unwell.	P319
Dispose of contents and/or container in accordance with regulations.	P501

**3. Composition/information on ingredients**

<b>Components of this substance</b>	<b>CAS number</b>	<b>%</b>
Kaolinite	1318-74-7	99
Crystalline silica (quartz)	14808-60-7	< 1
Cristobalite	14464-46-1	< 1
Crystalline titanium dioxide	13463-67-7	< 1
Water	7732-18-5	0.6

**4. First aid measures**

Inhalation:	<p>Most important acute symptoms/effects: some irritation of the upper airway and coughing may occur. Breathing difficulties may result from inhalation of dust. Chronic (prolonged or repeated exposure) inhalation of any dust from the substance may cause chest pain, chronic coughing, and discomfort.</p> <p>IF INHALED: Remove person to fresh air and keep comfortable for breathing.          Get medical help if the person feels unwell.</p>
Skin contact:	<p>Most important acute symptoms/effects: skin irritation, redness may occur.</p> <p>If ON SKIN: Remove contaminated clothing and rinse the skin with plenty of water. Soap may be used. Do not touch the eyes before hands are clean.          If skin irritation occurs, get medical help.</p>

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Eye contact:	Most important acute symptoms/effects: serious eye irritation, redness and tearing will occur.  IF IN THE EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical help if eye irritation persists.
Ingestion:	Most important acute symptoms/effects: Ingestion of significant amounts is unlikely. There are no known acute symptoms or effects.  If some of the substance gets in your mouth, rinse it out with water.
Most important delayed symptoms/effects after exposure:	None known after acute exposure, but repeated exposure of the dust may cause respiratory problems and cancer.
Protection of first responders:	Avoid undue contact with the substance and do not breathe the dust. Wear gloves and a mask to prevent transmission of pathogens.

## 5. Firefighting measures

Appropriate/suitable extinguishing media:	The product is not flammable and will not burn. Water spray, foam, carbon dioxide (CO <sub>2</sub> ) or dry powder may be used to put out surrounding fire but select extinguishing media that is appropriate for local circumstances and the surroundings.
Inappropriate extinguishing media:	None known.
Nature of hazardous combustion products:	None expected.
Other hazards arising from the mixture:	None known. (There is no direct explosion hazard and no sensitivity to mechanical impact or to static discharge for this substance).
Special protective equipment:	Do not breathe any dust that may be present, or vapours and combustion by-products from other sources. Use self-contained breathing apparatus and complete protective clothing. Do not attempt to act without suitable protective equipment.
Precautions and/or protective actions:	Move containers from the fire area if it can be done without risk. Water spray may be used to cool down the containers, but only after considering other material in the vicinity that may pose a hazard. Stay upwind and keep out of low areas. Take precautions to prevent extinguishing media contaminating surface water or ground water..

## 6. Accidental release measures

Distinguish between large or small spills or releases.

Personal precautions:	Do not breath dust. Avoid contact with the skin and eyes. Beware of wet product on the floor, which presents a slip hazard. Do not eat, drink, or smoke during clean-up operations. Wash hands and face thoroughly after handling. Do not touch eyes.
Protective equipment:	Wear protective gloves/protective clothing/eye protection. In case of inadequate ventilation or when dust clouds are present, wear respiratory protection.
Emergency actions and procedures:	No special emergency actions or procedures are required. Ventilate the spill area but prevent dust cloud formation.
Environmental precautions:	Avoid release to the environment. Prevent spills from entering storm sewers or drains.
Methods and materials for containment and cleaning up:	<p>The product is a dry powder. Prevent the formation of dust. Move intact containers from the spill area.</p> <p><u>Small spills:</u> Avoid dry sweeping which may generate airborne dust. Rather use water spraying or vacuum cleaning systems. Transfer into a suitable container for disposal and wash the area with water.</p> <p><u>Large spills:</u> Carefully shovel the dry material into suitable containers for disposal. Avoid creating dust. Flush the area with water if appropriate. Prevent the run-off entering sewers, water courses, basements, or confined areas. Dike if necessary.</p> <p>Dispose of via a licensed waste disposal contractor.</p>

## 7. Handling and storage

Precautions for safe handling:	Use only outdoors or in a well-ventilated area. Handle packaged products carefully to prevent accidental bursting. Avoid the creation of dust. Do not breath any dust. Use appropriate respiratory protection when dust is present. Do not get in eyes, on skin or on clothing. Do not eat, drink, or smoke when using this product. Wear protective gloves/protective clothing/eye protection, such as nitrile rubber gloves, safety glasses (or goggles when dust is present) and long-sleeved clothing. Wash hands and face thoroughly after handling. Do not touch eyes.
Conditions for safe storage:	Store locked up in a dry and well-ventilated place. Keep container tightly closed. Store separately from acidic materials. Store separately from any food, feed, or drinks. Keep out of reach of children and uninformed persons.



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Any incompatibilities: The substance is inert.

## 8. Exposure controls/personal protection

The occupational exposure limit for kaolin is 2.5 mg/m<sup>3</sup> measured as an 8-hour Time Weighted Average (TWA). For respirable crystalline silica dust, it is 0.1 mg/m<sup>3</sup>, and for titanium dioxide it is 5 mg/m<sup>3</sup>.

Wear personal protective equipment (protective gloves/protective clothing/eye protection/appropriate footwear) when handling the substance.

Avoid the release of dust. In case of inadequate ventilation, wear respiratory protection.



Appropriate engineering controls include local exhaust ventilation to limit accumulation of dust that may be generated. Exhaust streams from ventilation systems should be filtered before discharge into the atmosphere.

Eye wash stations and showers should be provided.

## 9. Physical and chemical properties

Physical state	Powder
Clarity (of liquids):	Not applicable
Colour:	White
Odour:	Not available
Odour threshold:	Not known
Melting point/freezing point:	> 450 °C
Boiling point (or initial point and range):	Data not available
Flammability (gases, liquids, solids):	Non-flammable
Lower and upper explosion limits:	Not explosive
Lower and upper flammability limits:	Not applicable
Flash point:	Non-flammable
Autoignition temperature:	Will not auto ignite
Decomposition temperature:	> 450 °C
pH, neat:	Not applicable
pH, aqueous dilution:	5 to 8 (% dispersion not given)
Dissociation in water, pKa:	Does not dissociate
Kinematic viscosity (of liquids) in mm <sup>2</sup> /s:	Not applicable
Solubility in water:	Insoluble but disperses easily
Solubility in a specified non-polar solvent:	Insoluble in non-polar solvents
Partition coefficient (n-octanol/water):	Not applicable
Vapour pressure (at 25 °):	Not applicable

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Density and/or relative density:	0.98 g/ml
Relative vapour density:	No data
Particle characteristics:	No data
Evaporation rate:	No data

### 10. Stability and reactivity

The substance disperses in water but does not dissociate.

Kaolin is inert and not corrosive and will not react.

No combustion by-products are expected, except for oxides of silicon and carbon at very high temperatures.

Pressure, shock, and vibrations have no known effect. No stabilisers were added or are required. There is no possibility of polymerisation.

The physical appearance will not change when properly stored and appropriately handled.

The substance disperses in water but does not dissociate.

### 11. Toxicological information

The following information is available for kaolin:

Acute oral LD <sub>50</sub>	> 5 000 mg/kg (rat)
Acute dermal LD <sub>50</sub>	> 5 000 mg/kg (rat)
Acute inhalation LC <sub>50</sub>	2.18 mg/ℓ (4-hour, rat) – not classified
Skin corrosion/irritation	Causes skin irritation
Eye damage/irritation	Causes severe eye irritation
Skin/respiratory sensitisation	Not a skin sensitiser
Germ cell mutagenicity	Unlikely to be genotoxic
Carcinogenicity	The impurities quartz and cristobalite are listed by IARC as human carcinogens (Group 1)
Reproductive toxicity	Unlikely to be a reproductive toxin
STOT SE	Limited information available
STOT RE	Repeated or prolonged exposure may cause lung damage

**Routes of exposure:** Careless actions and neglecting to wear personal protective equipment (PPE) may result in dermal and eye exposure to the dry powder. Exposure can also occur through inhalation of the dust. Ingestion of significant amounts is not considered a likely exposure route.

**Symptoms** related to the physical, chemical, and toxicological characteristics of the substance include skin irritation/itching and serious irritation of the eyes, redness, and excessive tearing (epiphora). Inhalation can cause irritation, breathing difficulties and a sensation of a burnt or sore throat.

**Effects of exposure:** Kaolin was classified as a skin irritant, severe eye irritant, possible carcinogen, and a respiratory toxicant, based on information for the substance and its impurities.

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The following information is available for the end-use product:

<b>Hazard class</b>	<b>Hazard category</b>	<b>Rationale for classification</b>
Acute toxicity, oral:	Not classified	Based on information for the substance
Acute toxicity, dermal:	Not classified	Based on information for the substance
Acute toxicity, inhalation:	Not classified	Based on information for the substance
Skin corrosion/irritation:	Category 2 – causes skin irritation	Reported for the substance
Serious eye damage/irritation:	Category 2 – causes serious eye irritation	Reported for the substance
Respiratory/skin sensitisation:	Not classified	Based on information for the substance
Germ cell mutagenicity:	Not classified	Based on information for the substance
Carcinogenicity:	Category 2 – suspected of causing cancer	Reported for the substance
Reproductive toxicity:	Not classified	Based on information for the substance
STOT single exposure:	Not classified	Based on information for the substance
STOT repeated exposure:	Category 2 – may cause damage to the lungs (inhalation)	Reported for the substance
Aspiration hazard:	Not classified	Based on information for the substance

**12. Ecological information**

Kaolin is obtained from a naturally occurring mineral and its chemical composition is like common clay. It is a stable inorganic compound. Once released, kaolin is expected to be stable in the environment and undistinguishable from clay minerals naturally present in soil. In groundwater, kaolin would be analytically indistinguishable from natural suspended clay of the same size. It was considered that the risk to non-target organisms from the representative use of aluminium silicate will be low.

The substance has no impact on honeybees or birds.

The substance has no impact on soil dwelling organisms.

No negative impact on sewage treatment is expected.

Being inorganic, the substance has no bio-accumulative potential. It has no mobility in soil.

The substance has no endocrine disrupting potential.

The substance does not contain halocarbon molecules and thus have no ozone depletion potential.

The substance is not expected to have any climate change potential.

<b>Hazard class</b>	<b>Hazard category</b>	<b>Rationale for classification</b>
Acute aquatic hazard:	Not classified	Based on information for the substance
Chronic aquatic hazard:	Not classified	Based on information for the substance

### 13. Disposal considerations

Dispose of waste residues responsibly as low-hazard chemical waste through a licensed waste removal company.

Dispose of the container by rinsing it properly. Do not re-use. Destroy mechanically and dispose of as ordinary waste through a licensed waste removal company.

Refer to the manufacturer or supplier for information on recovery, recycling, or reclamation options

Refer to the manufacturer or supplier for information on disposal of unused material.

The physical/chemical properties of the product should have no significant effect on disposal procedures.

The product does not burn, so incineration should not be attempted.

Do not dispose of into streams, dams, or other water bodies.

### 14. Transport information

UN number:	None. Not classified as dangerous in the context of transport regulations.
UN proper shipping name:	Not applicable.
UN packing group number:	Not applicable.
UN transport hazard class(es):	Not applicable.
A known marine pollutant (IMDG Code)?	Not a marine pollutant.
A known severe marine pollutant?	Not a marine pollutant.
Environmentally hazardous, ADR?	Not classified as dangerous in the context of transport regulations.
Environmentally hazardous, RID?	Not classified as dangerous in the context of transport regulations.
Environmentally hazardous, ADN?	Not classified as dangerous in the context of transport regulations.
Transport in bulk by sea, IMO?	Not classified as dangerous in the context of transport regulations.
There are no special precautions which a user needs to be aware of or needs to comply with.	

### 15. Regulatory information

Relevant safety regulations:	Regulations for hazardous chemical agents 2021, Department of Employment and Labour (March 2021).
Relevant health regulations:	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993).
Relevant environmental regulations:	The National Environmental Management Act, 107 of 1998 (NEMA). Guidelines on the administration of incidents, as described in section 30 of the NEMA, Department of Environmental Affairs (2019). Waste Classification and Management Regulations 2013, National Environmental Management Waste Act, Act 59 of 2008, Department of Water and Environmental Affairs.
Relevant transport regulations:	The National Road Traffic Act 93 of 1996, Department of Transport. South African National Standard SANS 10231:2019 Edition 4.2, Transport of dangerous goods by road – Operational requirements



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Subject to the Montreal Protocol? No.  
Subject to the Stockholm Convention? No.  
Subject to the Rotterdam Convention? No.  
Subject to any prohibitions? No.  
Subject to any restrictions? No.

## 16. Other information

SDS identification or reference number: 042

Date of the previous revision of this SDS: 25 August 2022

Previous revision number: 1

There is no additional information relevant to the material's nature or use, or any other relevant information.

Abbreviations that may have been used in this document:

AND means European Agreement Concerning the International Carriage of Dangerous Goods by Inland Waterways.

ADR means Agreement Concerning the International Carriage of Dangerous Goods by Road.

AOEL means the maximum amount of substance to which the worker may be exposed without any adverse health effects

CAS means Chemical Abstract Service.

Cat. Means Category.

GHS means Globally Harmonised System of Classification and Labelling of Chemicals.

IMDG Code means International Maritime Dangerous Goods Code.

IMO means International Maritime Organisation.

NEMA means National Environmental Management Act.

RID means Regulations concerning the International Carriage of Dangerous Goods by Rail.

SDS means safety data sheet.

STOT means specific target organ toxicity.

UN means United Nations.

This safety data sheet was compiled in compliance with the following regulations and guidelines:

- a. Regulations for hazardous chemical agents 2021, Department of Employment and Labour (March 2021).
- b. The globally harmonised system of classification and labelling of chemicals (GHS), 9th Revised Edition, United Nations (2021).
- c. Globally harmonised system of classification and labelling of chemicals (GHS), SANS 10234:2019, Ed. 2.00 (2019)

Compiler's code: KQ-kn-1144