

SAFETY DATA SHEET

SECTION 1: Identification of the substance/mixture and of the company/undertaking

Identification

Product Name: Seaweed

Other means of identification

Product Code(s) FG00282

UN number or ID number UN3082

Synonyms 35422E, 35426K

Recommended use of the chemical and restrictions on use

Recommended use Restrictions on use

Details of the supplier of the safety data sheet

Fired Up Kilns (AUS)

20 Helen Street, Heidelberg West 3081 Victoria Australia Tel +61 (0) 3 7013 9025 hello@firedupkilns.com.au

Emergency telephone number

AUS +61(0) 3 7013 9025 Office hours.
AUSTRALIAN POISONS INFORMATION CENTRE 24 HOUR SERVICE 13 11 26

POLICE / FIRE / AMBULANCE 000

SECTION 2: Hazards identification

Classification

Skin sensitization	Category 1
Carcinogenicity	Category 2

Hazards not otherwise classified (HNOC)

Not applicable

Label elements

Hazard Statements

Danger

H317 - May cause an allergic skin reaction

H351 - Suspected of causing cancer



Physical state Liquid

Precautionary Statements - Prevention

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

Use personal protective equipment as required

Avoid breathing dust/fume/gas/mist/vapors/spray

Contaminated work clothing must not be allowed out of the workplace



Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention

Specific treatment (see .? on this label)

IF ON SKIN: Wash with plenty of soap and water

If skin irritation or rash occurs: Get medical advice/attention

Wash contaminated clothing before reuse

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

37.8633 % of the mixture consists of ingredient(s) of unknown acute oral toxicity

40.9633 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity

51.4333 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)

51.4333 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)

40.4933 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

Other information

Very toxic to aquatic life with long lasting effects. Very toxic to aquatic life.

SECTION 3: Composition/information on ingredients

Not applicable.

Mixture

Chemical name	CAS No	Weight-%
Quartz	14808-60-7	5 – <10
Copper(II) carbonate hydroxide	12069-69-1	5 – <10
Titanium dioxide	13463-67-7	3 - <5
Zinc oxide (ZnO)	1314-13-2	1 - <3
Kaolin	1332-58-7	1 - <3
1,3,5-Triazine-1,3,5(2H,4H,6H)-triethanol	4719-04-4	0.1 - 1

SECTION 4: First-aid measures

Description of first aid measures

General advice Show this safety data sheet to the doctor in attendance. IF exposed or concerned: Get

medical advice/attention.

Inhalation Remove to fresh air.

Eye contact Skin contact Ingestion Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids.

Consult a physician.

Skin contact Wash with soap and water. May cause an allergic skin reaction. In the case of skin irritation

or allergic reactions see a physician.

Ingestion Rinse mouth.

Most important symptoms and effects, both acute and delayed

Symptoms Itching. Rashes. Hives.

Indication of any immediate medical attention and special treatment needed

Note to physicians May cause sensitization in susceptible persons. Treat symptomatically.



SECTION 5: Fire-fighting measures

surrounding environment.

Large Fire CAUTION: Use of water spray when fighting fire may be inefficient.

Unsuitable extinguishing mediaDo not scatter spilled material with high pressure water streams.

Specific hazards arising from the

chemical

Product is or contains a sensitizer. May cause sensitization by skin contact.

Explosion data

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

Special protective equipment and precautions for fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout

gear. Use personal protection equipment.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal

protective equipment as required. Evacuate personnel to safe areas. Keep people away

from and upwind of spill/leak.

Other information Refer to protective measures listed in Sections 7 and 8.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Pick up and transfer to properly labeled containers.

SECTION 7: Handling and storage

Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with

skin, eyes or clothing. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Do not eat, drink or smoke when using this product. Take

off contaminated clothing and wash before reuse.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place.

SECTION 8: Exposure controls/personal protection

Control parameters

Exposure Limits The following ingredients are the only ingredients of the product above the cut-off level (or

level that contributes to the hazard classification of the mixture) which have an exposure limit applicable in the region for which this safety data sheet is intended or other

recommended limit. At this time, the other relevant constituents have no known exposure

limits from the sources listed here.



CHEMICAL NAME	ACGIH TLV	OSHA PEL	NIOSH
Quartz 14808-60-7	TWA: 0.025 mg/m3 respirable particulate matter	TWA: 50 µg/m3 (vacated) TWA: 0.1 mg/m3 respirable dust : (250)/(%SiO2 + 5) mppcf TWA respirable fraction : (10)/(%SiO2 + 2) mg/m 3 TWA respirable fraction	IDLH: 50 mg/m3 respirable dust TWA: 0.05 mg/m3 respirable dust
Copper(II) carbonate hydroxide 12069-69-1	TWA: 1 mg/m3 Cu dust and mist	-	IDLH: 100 mg/m3 Cu dust and mist TWA: 1 mg/m3 Cu dust and mist
Titanium dioxide 13463-67-7	TWA: 10 mg/m3	TWA: 15 mg/m3 total dust (vacated) TWA: 10 mg/m3 total dust	IDLH: 5000 mg/m3 TWA: 2.4 mg/m3 CIB 63 fine TWA: 0.3 mg/m3 CIB 63 ultrafine, including engineered nanoscale
Zinc oxide (ZnO) 1314-13-2	STEL: 10 mg/m3 respirable particulate matter TWA: 2 mg/m3 respirable particulate matter	TWA: 5 mg/m3 fume TWA: 15 mg/m3 total dust TWA: 5 mg/m3 respirable fraction (vacated) TWA: 5 mg/m3 fume (vacated) TWA: 10 mg/m3 total dust (vacated) TWA: 5 mg/m3 respirable fraction (vacated) STEL: 10 mg/m3 fume	IDLH: 500 mg/m3 Ceiling: 15 mg/m3 dust TWA: 5 mg/m3 dust and fume STEL: 10 mg/m3 fume
Kaolin 1332-58-7	TWA: 2 mg/m3 particulate matter containing no asbestos and <1% crystalline silica, respirable particulate matter	TWA: 15 mg/m3 total dust TWA: 5 mg/m3 respirable fraction (vacated) TWA: 10 mg/m3 total dust (vacated) TWA: 5 mg/m3 respirable fraction	TWA: 10 mg/m3 total dust TWA: 5 mg/m3 respirable dust

Appropriate engineering controls

Engineering controls Showers

Eyewash stations Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Hand protection Wear suitable gloves.

Skin and body protection Wear suitable protective clothing.

Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are

exceeded or irritation is experienced, ventilation and evacuation may be required.



General hygiene considerations

Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product.

None known

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Physical state **Appearance** Color Odor

Liquid

Odor threshold

Property	Values	Remarks • Method
pH	No data available	None known
Melting point / freezing point	No data available	None known
Initial boiling point and boiling range	No data available	None known
Flash point	No data available	None known
Evaporation rate	No data available	None known
Flammability	No data available	None known
Flammability Limit in Air		None known

No data available

Upper flammability or explosive No data available

limits

Lower flammability or explosive

limits

Vapor pressure No data available Relative vapor density No data available Relative density No data available Water solubility No data available Solubility(ies) No data available **Partition coefficient** No data available 410 °C / 770 °F **Autoignition temperature Decomposition temperature**

Kinematic viscosity No data available Dynamic viscosity No data available

Other information

No information available **Explosive properties Oxidizing properties** No information available **VOC Content (%)** No information available

SECTION 10: Stability and reactivity

Reactivity No information available.

Chemical stability Stable under normal conditions. Possibility of hazardous reactions None under normal processing.

Conditions to avoid None known based on information supplied. Incompatible materials None known based on information supplied. Hazardous decomposition products None known based on information supplied.



SECTION 11: Toxicological information

Information on likely routes of exposure

Product Information

Inhalation Specific test data for the substance or mixture is not available.

Eye contact Specific test data for the substance or mixture is not available.

Skin contact May cause sensitization by skin contact. Specific test data for the substance or mixture is

not available. Repeated or prolonged skin contact may cause allergic reactions with

susceptible persons. (based on components).

Ingestion Specific test data for the substance or mixture is not available.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Itching. Rashes. Hives.

Acute toxicity

Numerical measures of toxicity

No information available

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral) 5,273.90 mg/kg ATEmix (dermal) 13,278.60 mg/kg ATEmix (inhalation-dust/mist) 13.10 mg/l

37.8633 % of the mixture consists of ingredient(s) of unknown acute oral toxicity

40.9633 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity

51.4333 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas) 51.4333 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)

40.4933 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Copper(II) carbonate hydroxide 12069-69-1	-= 1350 mg/kg (Rat) = 1495 mg/kg (Rat)	> 2000 mg/kg (Rat)	= 1.2 mg/L (Rat) 4 h
Titanium dioxide 13463-67-7	> 10000 mg/kg (Rat)	-	= 5.09 mg/L (Rat) 4 h
Zinc oxide (ZnO) 1314-13-2	> 5000 mg/kg (Rat)	> 2000 mg/kg (Rat)	> 5700 mg/m3 (Rat) 4 h
Kaolin 1332-58-7	> 5000 mg/kg (Rat)	> 5000 mg/kg (Rat)	-
1,3,5-Triazine-1,3,5(2H,4H,6H) -triethanol 4719-04-4	= 763 mg/kg (Rat)	> 4000 mg/kg (Rat)	= 0.4 mg/L (Rat) 4 h = 0.338 mg/L (Rat) 4 h

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation No information available.

Serious eye damage/eye irritation No information available.

Respiratory or skin sensitization May cause an allergic skin reaction.

Germ cell mutagenicity No information available.

Carcinogenicity Contains a known or suspected carcinogen. Classification based on data available for

ingredients. May cause cancer.



The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	ACGIH	IARC	NTP	OSHA
Quartz 14808-60-7	A2	Group1	Known	Х
Titanium dioxide 13463-67-7	-	Group 2B	-	Х

Legend

ACGIH (American Conference of Governmental Industrial Hygienists)

A2 - Suspected Human Carcinogen

IARC (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

Group 2B - Possibly Carcinogenic to Humans

NTP (National Toxicology Program)

Known - Known Carcinogen

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

Reproductive toxicity No information available.

STOT - single exposure No information available.

STOT - repeated exposure No information available.

Target organ effects Liver, Kidney, Respiratory system, Eyes, Lungs, Gastrointestinal tract (GI).

Aspiration hazard No information available.

Other adverse effects

Interactive effects

SECTION 12: Ecological information

Ecotoxicity Very toxic to aquatic life with long lasting effects.

Chemical name	Algae/aquatic plants	Fish	Toxicity to Microorganisms	Crustacea
Titanium dioxide 13463-67-7	-	LC50: =1.55mg/L (96h, Danio rerio)	-	-
1,3,5-Triazine-1,3,5(2H,4 H,6H)-triethanol 4719-04-4	-	LC50: =16.07mg/L (96h, Danio rerio)	-	-

Persistence and degradability

Bioaccumulation There is no data for this product.

Other adverse effects No information available.

SECTION 13: Disposal considerations

Disposal methods

Products

Waste from residues/unused

Dispose of in accordance with local regulations. Dispose of waste in accordance with

environmental legislation.

Contaminated packaging Do not reuse empty containers.

California Hazardous Waste Status This product contains one or more substances that are listed with the State of California as

a hazardous waste.



SECTION 14: Transport information

DOT

UN number or ID number Proper shipping name Transport hazard class(es) 9

Packing group III

Special Provisions DOT Marine Pollutant I

Marine pollutant Description UN3082

Environmentally hazardous substance, liquid, n.o.s.

8, 146, 173, 335, IB3, T4, TP1, TP29

Copper(II) carbonate hydroxide, Zinc oxide (ZnO)

UN3082, Environmentally hazardous substance, liquid, n.o.s. (Copper(II) carbonate

hydroxide, Zinc oxide (ZnO)), 9, III, Marine pollutant

171

Emergency Response Guide

Number

TDG

UN number or ID number UN3082

UN proper shipping name Environmentally hazardous substance, liquid, n.o.s.

Transport hazard class(es) 9

Packing group III

Special Provisions 16, 99

Marine pollutant name Copper(II) carbonate hydroxide, Zinc oxide (ZnO).

Description UN3082, Environmentally hazardous substance, liquid, n.o.s. (Copper(II) carbonate

hydroxide, Zinc oxide (ZnO)), 9, III

MEX

UN number or ID number UN3082

UN proper shipping name Environmentally hazardous substance, liquid, n.o.s.

Transport hazard class(es) 9

Packing group III

Technical Name Copper(II) carbonate hydroxide, Zinc oxide (ZnO)

Description UN3082, Environmentally hazardous substance, liquid, n.o.s. (Copper(II) carbonate

hydroxide, Zinc oxide (ZnO)), 9, III

Special Provisions 274, 331, 335

ICAO (air)

UN number or ID number UN proper shipping name Transport hazard class(es) 9

Packing group III

Description UN3082

Environmentally hazardous substance, liquid, n.o.s.

Special Provisions UN3082, Environmentally hazardous substance, liquid, n.o.s. (Copper(II) carbonate

hydroxide, Zinc oxide (ZnO)), 9, III

A97, A158, A197, A215

IATA

RID

ADR

ADN

UN number or ID number UN3082

UN proper shipping name Environmentally hazardous substance, liquid, n.o.s.

Transport hazard class(es) 9

Packing group III

Technical Name Copper(II) carbonate hydroxide, Zinc oxide (ZnO)

Description UN3082, Environmentally hazardous substance, liquid, n.o.s. (Copper(II) carbonate

hydroxide, Zinc oxide (ZnO)), 9, III

Special Provisions A97, A158, A197

ERG Code 9L

IMDG

UN number or ID number UN3082

UN proper shipping name Transport hazard class(es) 9

Packing group III

EmS-No F-A, S-F

Special Provisions 274, 335, 969



Marine pollutant P

Marine Pollutant Description Environmentally hazardous substance, liquid, n.o.s.

Copper(II) carbonate hydroxide, Zinc oxide (ZnO)

UN3082, Environmentally hazardous substance, liquid, n.o.s. (Copper(II) carbonate hydroxide, Zinc oxide (ZnO)), 9, III, Marine pollutant

<u>RID</u>

UN number or ID number UN3082

UN proper shipping name Environmentally hazardous substance, liquid, n.o.s.

Transport hazard class(es) 9

Packing group III

Classification code M6

Special Provisions 274, 335, 375, 601

Description UN3082, Environmentally hazardous substance, liquid, n.o.s. (Copper(II) carbonate hydroxide, Zinc oxide (ZnO)), 9, III

ADR

UN number or ID number UN3082

UN proper shipping name Environmentally hazardous substance, liquid, n.o.s.

Transport hazard class(es) 9

Packing group III

Classification code M6

Tunnel restriction code (-)

Special Provisions 274, 335, 601, 375

Description UN3082, Environmentally hazardous substance, liquid, n.o.s. (Copper(II) carbonate hydroxide, Zinc oxide (ZnO)), 9, III, (-)

<u>ADN</u>

UN number or ID number UN3082

UN proper shipping name Environmentally hazardous substance, liquid, n.o.s.

Transport hazard class(es) 9

Packing group III

Classification code M6

Special Provisions Description 274, 335, 375, 601

Description: UN3082, Environmentally hazardous substance, liquid, n.o.s. (Copper(II) carbonate

hydroxide, Zinc oxide (ZnO)), 9, III **Equipment Requirements** PP

SECTION 15: Regulatory information

International Inventories

TSCA

Contact supplier for inventory compliance status.

Chemical name	CAS No	US TSCA Inventory listing	US TSCA inactive/active designation
Water	7732-18-5	Present	Active
Nepheline syenite	37244-96-5	-	Unknown *
Quartz	14808-60-7	Present	Active
Copper(II) carbonate hydroxide	12069-69-1	Present	Active
Titanium dioxide	13463-67-7	Present	Active
Zinc oxide (ZnO)	1314-13-2	Present	Active
Kaolin	1332-58-7	Present	Active
Sodium carboxymethyl cellulose	9004-32-4	Present	Active
Smectite-group minerals	12199-37-0	Present	Active
1,3,5-Triazine-1,3,5(2H,4H,6H)- triethanol	4719-04-4	Present	Active
D-gluco-Heptonic acid, monosodium salt, (2.xi.)-	31138-65-5	Present	Active
Ethanolamine	141-43-5	Present	Active

^{*}Contact supplier for details. One or more substances in this product are either not listed on the US TSCA inventory, listed on the confidential US TSCA inventory or are otherwise exempted from inventory listing requirements



DSL/NDSL Contact supplier for inventory compliance status. **EINECS/ELINCS** Contact supplier for inventory compliance status. Contact supplier for inventory compliance status. **ENCS IECSC** Contact supplier for inventory compliance status. Contact supplier for inventory compliance status. KECL Contact supplier for inventory compliance status. **PICCS** AIIC Contact supplier for inventory compliance status. **NZIoC** Contact supplier for inventory compliance status.

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AIIC - Australian Inventory of Industrial Chemicals

NZIoC - New Zealand Inventory of Chemicals

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Chemical name	SARA 313 - Threshold Values %
Copper(II) carbonate hydroxide - 12069-69-1	1.0
Zinc oxide (ZnO) - 1314-13-2	1.0

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Copper(II) carbonate hydroxide 12069-69-1	-	Х	-	-
Zinc oxide (ZnO) 1314-13-2	-	X	-	-

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.



US State Regulations

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Water 7732-18-5	-	-	Х
Quartz 14808-60-7	Х	Х	Х
Copper(II) carbonate hydroxide 12069-69-1	Х	-	Х
Titanium dioxide 13463-67-7	Х	Х	Х
Zinc oxide (ZnO) 1314-13-2	Х	Х	Х
Kaolin 1332-58-7	Х	Х	Х
Ethanolamine 141-43-5	Х	Х	Х

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

SECTION 16: Other information

Chronic Hazard Star Legend * = Chronic Health Hazard

Key or legend to abbreviations and acronyms used in the safety data sheet

Legend Section 8: Exposure controls/personal protection

TWA TWA (time-weighted average) STEL STEL (Short Term Exposure Limit)

Ceiling Maximum limit value * Skin designation

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR) U.S. Environmental Protection Agency ChemView Database

European Food Safety Authority (EFSA) EPA (Environmental Protection Agency)

Acute Exposure Guideline Level(s) (AEGL(s))

U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act

U.S. Environmental Protection Agency High Production Volume Chemicals

Food Research Journal

Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)

National Institute of Technology and Evaluation (NITE)

Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)

NIOSH (National Institute for Occupational Safety and Health)

National Library of Medicine's ChemID Plus (NLM CIP)

National Library of Medicine's PubMed database (NLM PUBMED)

National Toxicology Program (NTP)

New Zealand's Chemical Classification and Information Database (CCID)

Organization for Economic Co-operation and Development Environment, Health, and Safety Publications

Organization for Economic Co-operation and Development High Production Volume Chemicals Program

Organization for Economic Co-operation and Development Screening Information Data Set

World Health Organization



AUSTRALIAN POISONS INFORMATION CENTRE 24 HOUR SERVICE 13 11 26

POLICE / FIRE / AMBULANCE 000

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 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.