

## 1. Identification of Substance & Company

### Product

Product name	PermaGro Elixir
Product code	SOIL-0180
HSNO approval	HSR002571
Approval description	Fertilisers (Subsidiary Hazard) Group Standard 2020
UN number	NA
DG Class	NA
Proper Shipping Name	NA
Packaging group	NA
Hazchem code	NA
Uses	Fertiliser

### Company Details

Company	<b>Blue Pacific Minerals</b>
Address	11-17 Huttloc Drive Tokoroa 3420 New Zealand
Website	www.bpmnz.co.nz
Telephone	+64 7 885 0550
Email	info@bpmnz.co.nz

**Emergency Telephone Number: 0800 678 444**

## 2. Hazard Identification

### Approval

This product has been approved under the Hazardous Substances and New Organisms Act (HSNO, Approval HSR002571, Fertilisers (Subsidiary Hazard) Group Standard 2020). The substance has been classified as hazardous according to the criteria in the Hazardous substances (Hazard Classification) Notice 2020:

### GHS 7 Classes

Skin irritant category 2  
Eye irritant category 2

### SYMBOLS

## WARNING



### Hazard Statements

H315 - Causes skin irritation.  
H319 - Causes serious eye irritation.

### Other Classifications

Zeolite contains crystalline silica. Particle size is >80µm. (not respirable)

### Precautionary Statements

<b>Preventative</b>	P103 - Read label before use. P264 - Wash hands thoroughly after handling. P280 - Wear protective gloves/protective clothing.
<b>Response</b>	P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337+P313 - If eye irritation persists: Get medical advice/attention. P302+P352 - IF ON SKIN: Wash with plenty of soap and water. P332+P313 - If skin irritation occurs: Get medical advice/ attention. P362 - Take off contaminated clothing and wash before re-use.
<b>Storage</b>	no storage statement.
<b>Disposal</b>	P501 - Dispose of contents/container in accordance with local/regional/national/international regulation.

### 3. Composition / Information on Ingredients

Component	CAS/ Identification	Concentration
Zeolite – crystalline aluminosilicates may contains oxides including silica and aluminium oxide*	1318-02-1	>60%
Humates	Mixture	10-30%
Seaweed extract	Mixture	0.1-1%
Water	7732-18-5	balance

This is a commercial product whose exact ratio of components may vary. Trace quantities of impurities are also likely.

\*silica component may include respirable crystalline silica <0.1%

### 4. First Aid

#### General Information

If medical advice is needed, have product container or label at hand. You should call the National Poisons Centre if you feel that you may have been harmed or irritated by this product. The number is 0800 764 766 (0800 POISON) (24 hr emergency service).

**Recommended first aid facilities** Ready access to running water is required. Accessible eyewash is required.

#### Exposure

**Swallowed** IF SWALLOWED: Call a POISON CENTRE or doctor/physician if you feel unwell. Rinse mouth. Do NOT induce vomiting. Give a glass of water to drink.

**Eye contact** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

**Skin contact** This product is non-irritating to skin. No further measures should be required.

**Inhaled** Generally, inhalation of vapours is unlikely to result in adverse health effects. If coughing, dizziness or shortness of breath is experienced, remove the patient to fresh air immediately. If patient is unconscious, place in the recovery position (on the side) for transport and contact a doctor.

#### Advice to Doctor

Treat symptomatically

### 5. Firefighting Measures

**Fire and explosion hazards:** There are no specific risks for fire/explosion for this chemical. It is non-flammable.

**Suitable extinguishing substances:** Carbon dioxide, extinguishing powder or water jet. Fight larger fires with water jet or alcohol resistant foam.

**Unsuitable extinguishing substances:** Unknown.

**Products of combustion:** Carbon dioxide, and if combustion is incomplete, carbon monoxide and smoke. Water. May form toxic mixtures in air and may accumulate in sumps, pits and other low-lying spaces, forming potentially explosive mixtures.

**Protective equipment:** No special measures are required.

**Hazchem code:** NA

### 6. Accidental Release Measures

**Containment** In all cases design storage to prevent discharge to storm water.

**Emergency procedures** If a significant spill occurs:  
Stop leak if safe/necessary; Isolate area. Collect spill – see below; Transfer to container for disposal. Dispose of according to guidelines below (Section 13).

**Clean-up method** Use absorbent (soil, sand or other inert material). Rags are not recommended for the clean-up of spills, as they may create fire or environmental hazard. Collect and seal in properly labelled containers or drums for disposal. If contamination of crops, sewers or waterways has occurred advise local emergency services.

**Disposal** Sweep up and collect recoverable material into labelled containers for recycling or salvage. Recycle containers wherever possible. This material may be suitable for approved landfill. Dispose of only in accord with all regulations.

**Precautions** No special protective clothing is normally necessary.

## 7. Storage & Handling

**Storage Handling** Stable under normal use and storage conditions. Keep exposure to a minimum, and minimise the quantities kept in work areas. See section 8 with regard to personal protective equipment requirements.

## 8. Exposure Controls / Personal Protective Equipment

### Workplace Exposure Standards



A workplace exposure standard (WES) has not been established by WorkSafe NZ for this product. There is a general limit of 3mg/m<sup>3</sup> for respirable particulates and 10mg/m<sup>3</sup> for inhalable particulates when limits have not otherwise been established.

NZ Workplace Exposure Stds	Ingredient	WES-TWA	WES-STEL
	Sodium hydroxide	No TWA, ceiling 2mg/m <sup>3</sup>	-
	Zeolite	-	-
	Crystalline Silica – all forms* *traces present, <0.1%	0.05mg/m <sup>3</sup>	-

### Engineering Controls

In industrial situations, it is expected that employee exposure to hazardous substances will be controlled to a level as far below the WES as practicable by applying the hierarchy of control required by the Health and Safety at Work Act (2015) and the Health and Safety at Work (General Risk and Workplace Management) Regulations 2016. Exposure can be reduced by process modification, use of local exhaust ventilation, capturing substances at the source, or other methods. If you believe air borne concentrations of mists, dusts or vapours are high, you are advised to modify processes or increase ventilation.

### Personal Protective Equipment

<b>General</b>		Personal Protective Equipment (PPE) should not be used as the primary means of exposure protection, except in the event of an accident or emergency situation or where all other means of protection have proven to inadequate. Clean PPE after use or dispose of as appropriate. Store PPE for re-use in a clean place. Regular training on the correct use of PPE should be provided. In particular the correct fitting and use of respirators and where applicable the cleaning of respirators should be undertaken.
<b>Eyes</b>		Avoid contact with eyes. Use safety glasses and or chemical splash goggles if splashes are possible. Select eye protection in accordance with AS/NZS 1337.
<b>Skin</b>		Protective gloves and clothing are not normally necessary. However, it is prudent to wear gloves when handling chemicals in bulk or for an extended period of time.
<b>Respiratory</b>		Respirator is not required under normal use. Ensure adequate natural ventilation.

### WES Additional Information

Not applicable

## 9. Physical & Chemical Properties

<b>Appearance</b>	solid
<b>Odour</b>	not specified
<b>Odour Threshold</b>	no data
<b>pH</b>	slightly alkaline
<b>Freezing/melting point</b>	no data
<b>Boiling Point</b>	no data
<b>Flashpoint</b>	no data
<b>Flammability</b>	not flammable
<b>Upper &amp; lower flammable limits</b>	NA
<b>Vapour pressure</b>	no data
<b>Vapour density</b>	no data
<b>Specific gravity/density</b>	no data
<b>Solubility</b>	partially soluble in water
<b>Partition coefficient</b>	no data
<b>Auto-ignition temperature</b>	no data
<b>Decomposition temperature</b>	no data
<b>Viscosity</b>	no data
<b>Particle Characteristics</b>	no data

## 10. Stability & Reactivity

<b>Stability</b>	Stable
<b>Conditions to be avoided</b>	Containers should be kept closed in order to avoid contamination. Keep from extreme heat and open flames.
<b>Incompatible groups</b>	Strong bases, strong oxidising agents
<b>Substance Specific Incompatibility</b>	none known
<b>Hazardous decomposition products</b>	Thermal decomposition may result in ammonia, nitrogen oxides, sulphur oxides
<b>Hazardous reactions</b>	none known

## 11. Toxicological Information

### Summary

IF SWALLOWED: not considered harmful.  
 IF IN EYES: may cause serious eye irritation, may cause lachrymation, irritation, pain and redness.  
 IF ON SKIN: mixture is considered irritating to skin.  
 IF INHALED: no effect known.

### Supporting Data

<b>Acute</b>	<b>Oral</b>	Using LD <sub>50</sub> 's for ingredients, the Acute Toxicity Estimate (ATE) (oral) for the mixture is >2,000 mg/kg. Data considered includes: ammonium sulphate 640 mg/kg (mouse), 2840mg/kg (rat), ammonium nitrate 2217 mg/kg (rat).
	<b>Dermal</b>	Using LD <sub>50</sub> 's for ingredients, the Acute Toxicity Estimate (ATE) (dermal) for the mixture is >2,000 mg/kg.
	<b>Inhaled</b>	Using LD <sub>50</sub> 's for ingredients, the Acute Toxicity Estimate (ATE) (inhalation) for the mixture is >5mg/L/4h. Data considered includes: ammonium nitrate >88.8 mg/L (rat).
	<b>Eye</b>	The mixture is considered to be an eye irritant, because some of the ingredients (zeolite ingredients, urea, ammonium nitrate) present are considered eye irritants in more concentrated form.
	<b>Skin</b>	The mixture is considered to be a skin irritant.
<b>Chronic</b>	<b>Sensitisation</b>	No ingredient present at concentrations > 0.1% is considered a sensitizer.
	<b>Mutagenicity</b>	No ingredient present at concentrations > 0.1% is considered a mutagen.
	<b>Carcinogenicity</b>	No ingredient present at concentrations > 0.1% is considered a carcinogen.
	<b>Reproductive / Developmental</b>	No ingredient present at concentrations > 0.1% is considered a reproductive or developmental toxicant or have any effects on or via lactation.
	<b>Systemic</b>	No ingredient present at concentrations > 1% is considered a target organ toxicant.
	<b>Aggravation of existing conditions</b>	None known.

## 12. Ecological Data

### Summary

This mixture is not considered harmful towards aquatic organisms. In all cases prevent run-off to drains, sewers and waterways.

### Supporting Data

<b>Aquatic</b>	Using EC <sub>50</sub> 's for ingredients, the calculated EC <sub>50</sub> for the mixture is > 100 mg/L. Data considered includes: <b>ammonium sulphate</b> 48 mg/l (96hr, Catla catla), 81 - 130 mg/l (96hr, Crangon crangon (Crustacea)), <b>ammonium nitrate</b> 74 mg/l (48hr) fish, 111 - 840 mg/L (48hr) (Crustacea) 83 mg/l (algae).
<b>Bioaccumulation</b>	No data
<b>Degradability</b>	No data
<b>Soil</b>	No evidence of soil toxicity.
<b>Terrestrial vertebrate</b>	See acute toxicity
<b>Terrestrial invertebrate</b>	No evidence of toxicity towards invertebrates
<b>Biocidal</b>	no data
<b>Environmental effect levels</b>	No EELs are available for this mixture or ingredients

## 13. Disposal Considerations

<b>Restrictions</b>	There are no product-specific restrictions, however, local council and resource consent conditions may apply, including requirements of trade waste consents.
---------------------	---

**Disposal method**

Disposal of this product must comply with the Hazardous Substances (Disposal) Notice 2017 and the requirements of the Resource Management Act for which approval should be sought from the Regional Authority. The substance must be treated and therefore rendered non-hazardous before discharge to the environment.

**Contaminated packaging**

Disposal of contaminated packaging must comply with the Hazardous Substances (Disposal) Notice 2017 clause 12. Ensure that the package is rendered incapable of containing any substance and is disposed in a manner that is consistent with the requirements of the substance it contained and the material of the package. If possible reuse or recycle packaging.

## 14. Transport Information

**Land Transport Rule: Dangerous Goods 2005 - NZS 5433:2007**

There are no specific restrictions for this product (not a dangerous good).

<b>UN number:</b>	NA	<b>Proper shipping name:</b>	NA
<b>Class(es)</b>	NA	<b>Packing group:</b>	NA
<b>Precautions:</b>	NA	<b>Hazchem code:</b>	NA

**IMDG**

<b>UN number:</b>	NA	<b>Proper shipping name:</b>	Not regulated
<b>Class(es)</b>	NA	<b>Packing group:</b>	NA
<b>Precautions:</b>	NA	<b>EmS</b>	NA

**IATA**

<b>UN number:</b>	NA	<b>Proper shipping name:</b>	Not regulated
<b>Class(es)</b>	NA	<b>Packing group:</b>	NA
<b>Precautions:</b>	NA	<b>ERG Guide</b>	NA

## 15. Regulatory Information

This product is an approved substance under the Hazardous Substances and New Organisms Act (HSNO). Approval code: HSR002571, Fertilisers (Subsidiary Hazard) Group Standard 2020. All ingredients appear on the New Zealand Inventory of Chemicals NZIoC.

### Specific Controls

Key workplace requirements are:

SDS	To be available within 10 minutes in workplaces storing any quantity.
Inventory	An inventory of all hazardous substances must be prepared and maintained.
Packaging	All hazardous substances should be appropriately packaged including substances that have been decanted, transferred or manufactured for own use or have been supplied
Labelling	Must comply with the Hazardous Substances (Labelling) Notice 2017.
Emergency plan	Not required.
Certified handler	Not required.
Tracking	Not required.
Bunding & secondary containment	Not required.
Signage	Not required.
Location compliance certificate	Not required.
Flammable zone	Not required.
Fire extinguisher	Not required.

Note: The above workplace requirements apply if only this particular substance is present. The complete set of controls for a location will depend on the classification and total quantities of other substances present in that location.

### Other Legislation

In New Zealand, the use of this product may come under the Resource Management Act and Regulations, the Health and Safety at Work Act 2015 and the Health and Safety at Work (General Risk and Workplace Management) Regulations 2016, local Council Rules and Regional Council Plans.

## 16. Other Information

### Abbreviations

<b>Approval Code</b>	Approval HSR002571, Fertilisers (Subsidiary Hazard) Group Standard 2020 Controls, EPA. <a href="http://www.epa.govt.nz">www.epa.govt.nz</a>
<b>CAS Number</b>	Unique Chemical Abstracts Service Registry Number

<b>EC<sub>50</sub></b>	Ecotoxic Concentration 50% – concentration in water which is fatal to 50% of a test population (e.g. daphnia, fish species)
<b>EPA</b>	Environmental Protection Authority (New Zealand)
<b>GHS</b>	Globally Harmonised System of Classification and Labelling of Chemicals, 7 <sup>th</sup> revised edition, 2017, published by the United Nations.
<b>HAZCHEM Code</b>	Emergency action code of numbers and letters that provide information to emergency services, especially fire fighters
<b>HSNO</b>	Hazardous Substances and New Organisms (Act and Regulations)
<b>IARC</b>	International Agency for Research on Cancer
<b>LEL</b>	Lower Explosive Limit
<b>LD<sub>50</sub></b>	Lethal Dose 50% – dose which is fatal to 50% of a test population (usually rats).
<b>LC<sub>50</sub></b>	Lethal Concentration 50% – concentration in air which is fatal to 50% of a test population (usually rats)
<b>STEL</b>	Short Term Exposure Limit - The maximum airborne concentration of a chemical or biological agent to which a worker may be exposed in any 15 minute period, provided the TWA is not exceeded
<b>TWA</b>	Time Weighted Average – generally referred to WES averaged over typical work day (usually 8 hours)
<b>UEL</b>	Upper Explosive Limit
<b>UN Number</b>	United Nations Number
<b>WES</b>	Workplace Exposure Standard - The airborne concentration of a biological or chemical agent to which a worker may be exposed during work hours (usually 8 hours, 5 days a week). The WES relates to exposure that has been measured by personal monitoring using procedures that gather air samples in the worker's breathing zone.

#### References

<b>Data</b>	Unless otherwise stated comes from the EPA HSNO chemical classification information database (CCID).
<b>Controls</b>	EPA notices, <a href="http://www.epa.govt.nz">www.epa.govt.nz</a> , Health and Safety at Work (Hazardous Substances) Regulations 2017, <a href="http://www.legislation.govt.nz">www.legislation.govt.nz</a>
<b>WES</b>	The latest NZ Workplace Exposure Standards, published by WorkSafe NZ and available on their web site – <a href="http://www.worksafe.govt.nz">www.worksafe.govt.nz</a> .
<b>Other References:</b>	Suppliers SDS

#### Review

<b>Date</b>	<b>Reason for review</b>
August 2023	Not applicable – new SDS
July 2025	Name change

#### Disclaimer

This SDS was prepared by Datachem LTD and is based on our current state of knowledge, including information obtained from suppliers. The SDS is given in good faith and constitutes a guideline (not a guarantee of safety). The level of risk each substance poses is relevant to its properties (as summarised in the SDS) AND HOW THE SUBSTANCE IS USED. While guidelines are given for personal protective equipment, such precautions must be relevant to the use. The likely GHS 7 classifications for this SDS have been estimated based on general information from the supplier (e.g., hazard, toxicological). This SDS is copyright Datachem and must not be copied, edited or used for other than intended purpose. To contact the SDS author, email [info@datachem.co.nz](mailto:info@datachem.co.nz) or phone: **+64 21 1040951**.

