

1. PRODUCT IDENTIFIER & IDENTITY FOR THE CHEMICAL

Product Name: **SureCROP VAM**

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Emergency Contact

Poisons Information Centre:
13 11 26

LawrieCo Technical Manager:
0408 268 058

CAS Number	Mixture	Product Number	8021
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Product Usage: As a biological seed coating with the balance of phosphorous, calcium, zinc, manganese, bio-stimulants and beneficial microbes for use prior to planting.

2. HAZARD IDENTIFICATION

Classified as a Non-Hazardous Substance in accordance with Safe Work Australia - Hazardous Substances Information System (HSIS) Australia, Global Harmonised System (GHS) documents and in accordance with the Standard for the Uniform Scheduling of Medicines and Poison (SUSMP).

Not classified as Dangerous Goods in accordance with the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG).

GHS Classification

Signal Word - **NONE**

Hazard Class

Acute toxicity - oral

Acute toxicity - dermal

Hazardous to the aquatic environment - long-term hazard

Hazard Category

5

5

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Pictogram

Classified as
Non-Hazardous

Hazard Statements

H303+H313

**May be harmful if
swallowed.**

Not Defined:

May cause irritation
to the eyes.

Precautionary Statements

General

P102 + P103 Keep out of reach of children. Read label before use.

Prevention

P264 Wash skin thoroughly after handling.

P280 Wear protective gloves/ eye protection/ face protection.

Response

P301 + P330 IF SWALLOWED: Rinse mouth.

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

P332 + P313	present and easy to do. Continue rinsing.
P337 + P313	If skin irritation occurs: get medical advice/ attention.
<u>Storage</u>	If eye irritation persists: Get medical advice/attention.
P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
<u>Disposal</u>	
P501	Dispose of contents/ container to an approved waste disposal plant.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Product name	SureCROP VAM	SDS Code	8021
Product use	As a biological seed coating with the balance of phosphorous, calcium, zinc, manganese, bio-stimulants and beneficial microbes for use prior to planting.		
Ingredients	Name	CAS Number	Proportion w/w
	Water	7732-18-5	45.0 – <50.0%
	Zinc Oxide	1314-13-2	1.0 – <5.0%
	Manganese (II) Carbonate	598-62-9	1.0 – <5.0%
	Proprietary Plant Growth Stimulants (Non-Hazardous)	Mixture	30.0 – <35.0%
	Other Proprietary Ingridients (Non-Hazardous)	Mixture	5.0 – <10.0%

4. FIRST AID MEASURES

Description of necessary first aid measures

Inhalation	Unlikely route of exposure, but if applicator feels drowsy, dizzy, tired or experiencing headaches, remove oneself to fresh air.
Ingestion	Never give anything by mouth to an unconscious person. Rinse mouth out with water and give plenty of water to drink. Do NOT induce vomiting. Consult a doctor if any symptoms occur.
Eyes	Rinse thoroughly with plenty of water for at least 15 minutes. Consult a doctor if any irritation occurs.
Skin and hair	If skin or hair contact occurs, remove all contaminated clothing, wash skin and hair with soap and plenty of water.
First aid facilities	Clean water supply, soap or skin cleaner.
Advice to doctor	If poisoning occurs, consult with the Poisons Information Centre (Telephone 13 11 26). Have a copy of this safety data sheet or label available. Treat symptomatically.



Symptoms caused by exposure

Irritation of the skin and eyes.

Medical attention and special treatment

Wash exposed skin and hair with water and soap. If swallowed give plenty of water. If in eyes flush continuously with running water for at least 15 minutes.

5. FIRE FIGHTING MEASURES

Suitable extinguishing equipment	Use water spray, alcohol resistant foam, dry chemical or carbon dioxide. Product is non-flammable.
Specific hazards arising from the chemical fire	Nature of decomposition products not known.

Special protective equipment and precautions for fire fighters
Further information

Wear self contained breathing apparatus for fire fighting if necessary.
No HAZCHEM Code assigned.

No data available



6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Ensure all non-essential personnel are away from the contaminated area. For personal protection see section 8.

Environmental precautions
Methods and materials for containment and cleaning up

Prevent from entering waterways, sewage and drains. Collect all residues. For any queries consult Local Statuary Authorities.
Absorb onto dry sand or earth and placed into labelled drums. Sweep up and shovel. Keep in suitable, closed containers for disposal.



7. HANDLING and STORAGE

Precautions for Safe Handling

Avoid contact with skin and eyes. For personal protection see section 8. After use and before eating, drinking or smoking, wash all exposed skin and hair with soap and water. Keep out of reach of children.

Conditions of Safe Storage and Incompatibilities
Specific end uses

Containers must be clearly labelled. Store at room temperature. Keep container tightly closed out of direct sunlight.

Apart from uses mentioned in section 1. no other specific uses are stipulated.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure standards OEL

There are no assigned exposure standards for this product.

Exposure standards TWA

Zinc Oxide dust (1314-13-2) = ppm
10mg/m³

Exposure standards STEL

There are no assigned exposure standards for this product.

Biological limited values

There are no known Biological Limited Values that have been assigned.

Engineering controls

Handle in accordance with good industrial hygiene and safety practices. Wash hands before breaks and at the end of the work day.

Personal Protection

Inhalation

AS –NZS 1716

Respiratory protection after application where dust may form after drying. For nuisance exposures use a class P1 or P2 particle respirator. For higher level of protection use a class P3. Use respirators and components tested and approved under appropriate government standards.

Eye

AS –NZS 1337

Face shield or safety glasses fitted with side shields must be worn at all times during the handling and application period. Do NOT wear contact lenses. Use equipment tested and approved under appropriate government standards.

Gloves

AS –NZS 2161

Handle with gloves. Gloves must be inspected prior to use. It is advisable to wear viton or PVC elbow length gloves at all times during the handling and application period. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Wash and dry hands.

Footwear

AS –NZS 2210

It is advisable to wear enclosed footwear during the handling and application period.

Clothing

AS –NZS 2919

It is advisable to wear protective clothing during the handling and application period.

Hearing

AS –NZS 1270

Hearing protection not required.

Other Requirements

The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. Avoid unnecessary contact with eyes, skin and hair. After application, wash skin and hair thoroughly with soap and water.



9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance (<i>physical state, colour, etc</i>)	Light brown - grey, liquid suspension concentrate
Odour	Slight earthy odour
Odour threshold	No data available
pH (@ 20°C)	9.90 - 10.20
Melting point	No data available
Freezing point	No data available
Boiling point and boiling range	No data available
Flash point	No data available
Evaporation rate	No data available
Flammability (<i>solid, gas</i>)	No data available
Upper/lower flammability or explosive limits	No data available
Vapour pressure	No data available
Vapour density	No data available
Relative density (@ 15.6°C)	1.26 - 1.31g/mL
Solubility	Miscible in water
Partition coefficient: n-octanol/water	No data available
Auto-ignition temperature	No data available
Decomposition temperature	>100 °C
Viscosity	No data available
Specific heat value	No data available
Saturated vapour concentration	No data available
Release of invisible flammable vapours and gases	No data available

Particle size (average and range)	<250µm, no other data available
Size Distribution	No data available
Shape and aspect ratio	No data available
Crystallinity	No data available
Dustiness	No data available
Surface area	No data available
Degree of aggregation or agglomeration, and dispersibility	No data available
Redox Potential	No data available
Biodurability or biopersistence	No data available
Surface coating or chemistry	No data available
Volatile organic compounds	No data available
% volatile	No data available

10. STABILITY AND REACTIVITY

Reactivity	No data available
Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	Will not polymerise. Combustion in contact with strong oxidisers.
Conditions to avoid	No data available
Incompatible materials	Strong oxidising agents.
Hazardous decomposition products	No data available In the event of fire: see section 5.

11. TOXICOLOGICAL INFORMATION

Ingredient	Zinc Oxide dust (1314-13-2)
Acute toxicity	No data available
Acute oral toxicity	LD ₅₀ - oral mouse 7950mg/kg LDLo - oral human 500mg/kg
Acute dermal toxicity	LDLo - dermal rat >2,000mg/kg
Acute inhalation toxicity	No data available
Specific Target Organ Toxicity STOT - single exposure	Oral - May be harmful if swallowed Acute toxicity - oral - hazard category 5 Dermal - May harmful in contact with skin Acute toxicity - dermal - hazard category 5
Specific Target Organ Toxicity STOT - repeated exposure	No data available
Other Health Effects	
Inhalation	No data available
Ingestion	Irritant to mucous membranes.
Eyes	May cause irritation to the eyes. If in eyes, may cause other symptoms including burning sensation, redness, swelling and/or blurred vision.
Skin	Causes skin irritation. Repeated or prolonged exposure may cause skin dryness and cracking.

Carcinogenicity No component of this product present at levels greater than or equal to 0.1% is identified as a probable, possible or confirmed human carcinogen by IARC.

Mutagenicity No data available

Reproductive Toxicity No data available

Aspiration hazard No data available

To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.

12. ECOLOGICAL INFORMATION

Ectotoxicity Environment - May cause long lasting harmful effects to the aquatic life.
Hazardous to the aquatic environment - long-term hazard - hazard category 5

Persistence and degradability No data available

Bioaccumulative potential No data available

Mobility in soil No data available

Other adverse effects No data available

13. DISPOSAL CONSIDERATIONS

Spills

Prevent spills from entering drains, surface water and ground water. Collect all residues. Disposal must be carried out in accordance with Local Statuary Authorities.

Material

Handle and dispose of in compliance with current environmental waste legislation. If in doubt contact Local Statuary Authorities.

Contaminated Material

Empty containers may be suitable for reuse or recycling after cleaning and appropriate disposal of the cleaning agents. Disposal method dependent upon degree and nature of contaminated material. Disposal must be carried out in compliance with current environmental waste legislation. If in doubt seek professional advice or contact Local Statuary Authorities.

14. TRANSPORT INFORMATION

UN number Not required under ADG Code

Proper Shipping Name NOT CONSIDERED DANGEROUS GOODS

Transport Hazard Class Not required under ADG Code **Subsidiary Risk** Not required under ADG Code

Packing Group Not required under ADG Code.



Environmental hazards for transport purposes Subject to Annexe III - Harmful Substances carried in Packaged Form.

Special No data available

**precautions for
user**

**Additional
Information
HAZCHEM
IMDG**

No additional information required by overseas regulatory agencies or regulations for the transport of goods by other modes.
Not required according to ADG Code.
Not required according to IMDG Code.

15. REGULATORY INFORMATION

Hazard Category	The product is classified as a Non-Hazardous Substance in accordance with Safe Work Australia in accordance with Hazardous Substances Information System (HSIS) Australia and Global Harmonised System (GHS)
Montreal Protocol	Not an ozone depleting substance.
The Stockholm Convention	Not a persistent organic pollutant.
The Rotterdam Convention	Not a banned pesticide or industrial chemical.
Basal Convention	Not a hazardous waste.
MARPOL	Subject to Annexe III - Harmful Substances carried in Packaged Form.
Safety, health and environmental regulations	SUSMP Classification Not Classified as a Schedule Poison.

16. OTHER INFORMATION

This Safety Data Sheet conforms with the "PREPARATION OF SAFETY DATA SHEETS FOR HAZARDOUS CHEMICALS Code of Practice, DECEMBER 2011" by Safe Work Australia. To meet the GHS requirements under the WHS regulations in relation to the preparation of safety data sheets for hazardous chemicals.

SDS prepared March, 2014 version number 1.

Legend of Abbreviations and Acronyms

HSIS - Hazardous Substances Information System
GHS - Globally Harmonised System
ADG - Australian Dangerous Goods Code for the Transport of Dangerous Goods by Road or Rail
IERG - Initial Emergency Response Guide
SDS - Safety Data Sheet
CAS Number - Chemical Abstract Service Number
w/w - Weight per weight
AS/NZS - Australian Standards and New Zealand Standards
OEL - Occupational Exposure Limit
STEL - Short Term Exposure Limit

pH - Potential of hydrogen
°C - Degrees celcius
STOT - Specific Target Organ Toxicity
BCF - Bioconcentration Factor
MARPOL - International Convention for the Prevention of Pollution from Ships
IMDG - International Maritime Dangerous Goods
UN Number - United Nations Number
SUSMP - Standards for the Uniform Scheduling of Medicines and Poisons
LD50 - Median lethal dose required to kill half the members of a tested population after a specified test duration
LDLo - (Lethal dose low) The lowest dosage per unit of bodyweight of a substance known to have resulted in a fatality in a particular animal species. mg/kg - Milligrams per kilogram
IARC- International Agency for Research on Cancer

Emergency Contact

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13 11 26

LawrieCo Technical Manager:
0408 268 058

Disclaimer

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End of Safety Data Sheet