

SAFETY DATA SHEET

Section 1. Identification of the material and the supplier

Product: **Van Iperen FoliaStim® Mn Zn Liquid**
 Item Code:
 Product Use: Fertiliser
 Restriction of Use: Refer to Section 15

New Zealand Supplier: Horticulture Ltd
 Address: 10 Firth Street
 Drury, 2113

Telephone: +64 9 294 8453
 Fax Number: +64 9 294 7272

Emergency Telephone: 0800 764 766 (National Poison Centre)

Date of SDS Preparation: 25 February 2021

Section 2. Hazards Identification

The manufacturer has stated that this substance is NOT hazardous according to Regulation (EC) No. 1272/2008 [CLP] therefore non-hazardous as per EPA Hazardous Substances (Classification) Notice 2017

Section 3. Composition / Information on Ingredients

| Ingredients | Wt% | CAS NUMBER. |
|---------------------------|---------|-------------|
| Non-hazardous ingredients | To 100% | Proprietary |

Section 4. First Aid Measures

Routes of Exposure:

If in Eyes: Rinse cautiously with water for 15 minutes. If eye irritation persists: call doctor/physician.

If on Skin: Wash with plenty of soap and water. If skin irritation occurs: get medical advice/attention.

If Swallowed: Rinse mouth with water. Never give anything to the mouth of an unconscious person. If vomiting occurs, place victim face downwards, with the head turned to the side and lower than the hips to prevent vomit entering the lungs. Call a POISON CENTER or doctor/physician if you feel unwell.

If Inhaled: Remove person to fresh air. Remove contaminated clothing and loosen remaining clothing. Allow person to assume most comfortable position and keep warm. Keep at rest until fully recovered. In case of lung

irritation, first treatment with dexametason aerosol (spray). Get medical advice if breathing becomes difficult.

Most important symptoms and effects, both acute and delayed

Inhalation: Slight irritation. Exposure to high concentrations: irritation of the respiratory tract, dry/sore throat, coughing, respiratory difficulties.
Skin contact: Slight irritation. Red skin.
Eye contact: Redness of the eye tissue. Slight irritation. Visual disturbances.
Ingestion: Nausea. Vomiting.
Chronic symptoms: On continuous/repeated exposure/contact: dry skin. Skin rash/inflammation.

Treatment: Treat symptomatically

Section 5. Fire Fighting Measures

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| Hazard Type | Non Flammable, Non-combustible material. |
| Hazards from decomposition products | On heating/burning: release of toxic and corrosive gases/vapours (nitrous vapours), and formation of metallic fumes. |
| Suitable Extinguishing media | Extinguishing media for surrounding fires: All extinguishing media allowed. Use fire extinguishing methods suitable to surrounding conditions. |
| Precautions for firefighters and special protective clothing | Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents. Exposure to fire/heat: keep upwind, consider evacuation and have neighborhood close doors and windows. Dilute toxic gases with water spray. |
| HAZCHEM CODE | None allocated |

Section 6. Accidental Release Measures

Wear appropriate protective clothing. Exclude non-essential people from the area. Ensure adequate ventilation. Do not get in eyes, on skin, or on clothing. Keep away from naked flames/heat.

Stop leaks if possible. Dam up the liquid spill. Prevent spreading in sewers. Prevent soil and water pollution. Contain leaking substance, pump over in suitable containers. Turn leaking containers leak-side up to prevent the escape of liquid. Notify authorities if product enters sewers or public waters.

Any spillage should be cleaned up immediately. Collect spill in closed and suitable containers for disposal. Take up rest of liquid spill into absorbent material sand, earth, vermiculite. Scoop absorbed substance into closing containers. Dispose of according to Local Regulations detailed in Section 13.

Section 7. Handling and Storage

Precautions for Handling:

- Use sufficient ventilation.
- Do not get in eyes, on skin, or on clothing.
- Wear protective clothing as advised in section 8.
- Do not eat, drink or smoke during use.
- Always wash hands after handling the product.
- Remove contaminated clothing and protective equipment before entering eating areas.
- Care for eyewash stations at the workplace.
- Keep away from food, drink and animal feeding stuffs.

- Do not discharge the waste into the drain.

Precautions for Storage:

- Keep preferably in the original container.
- Store in dry, cool, well-ventilated area.
- Keep out of direct sunlight.
- Recommended storage temperature: 0°C - 30°C.

Section 8 Exposure Controls / Personal Protection

WORKPLACE EXPOSURE STANDARDS (provided for guidance only)

| Substance | TWA | | STEL | |
|-----------|-----|-------------------|------|-------------------|
| | ppm | mg/m ³ | ppm | mg/m ³ |

No ingredients have exposure limits

Workplace Exposure Standard – Time Weighted Average (WES-TWA). The time-weighted average exposure standard designed to protect the worker from the effects of long-term exposure. Workplace Exposure Standard – Short-Term Exposure Limit (WESSTEL). The 15-minute average exposure standard. Applies to any 15- Minute period in the working day and is designed to protect the worker against adverse effects of irritation, chronic or irreversible tissue change, or narcosis that may increase the likelihood of accidents. The WES-STEL is not an alternative to the WES-TWA; both the short-term and time-weighted average exposures apply. Workplace Exposure Standards and Biological Exposure Indices NOV 2019 11TH EDITION.

Engineering Controls

Ensure good ventilation of the work station.

Personal Protection Equipment



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|--------------------|---|
| Eyes | Use safety goggles. |
| Skin | Good resistance gloves: nitrile rubber. Take advice to your gloves' supplier |
| Respiratory | Ensure adequate air ventilation. Mist formation: aerosol mask with filter type P2 |

Section 9 Physical and Chemical Properties

| | |
|--|----------------|
| Appearance | Liquid |
| Colour | Dark Brown |
| Odour | Characteristic |
| Odour Threshold | Not available |
| pH | 5 - 6 |
| Crystallization temperature | -5°C |
| Boiling Point | Not available |
| Melting Point | Not available |
| Freezing Point | Not available |
| Flash Point | Not available |
| Flammability | Not available |
| Upper and Lower Explosive Limits | Not available |
| Vapour Pressure | 2300 Pa |
| Vapour Density | Not available |
| Density | 1.16 kg/l |
| Solubilities | Complete |
| Partition coefficient (n-octanol/water) | Not available |
| Auto-ignition | Not available |

| | |
|----------------------------------|---------------|
| Temperature | |
| Decomposition Temperature | Not available |
| Viscosity | Not available |

Section 10. Stability and Reactivity

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| Stability of Substance | The product is stable at normal handling and storage conditions. May be give slightly sedimentation after some time. |
| Hazardous Reactions | Thermal decomposition can lead to the escape of irritating gases and vapours (oxides of nitrogen). This product can react with strong reducing or oxidizing agents. May react violently with acids and with (some) bases. |
| Conditions to Avoid | Avoid high temperatures. Keep out of frost. |
| Incompatible Materials | Keep substance away from: oxidizing agents. |
| Hazardous Decomposition Products | On burning: release of toxic and corrosive gases/vapours (nitrous vapours, ammonia, carbon monoxide - carbon dioxide). |

Section 11 Toxicological Information

Acute Effects:

| | |
|-------------------|-----------------|
| Swallowed | Not applicable. |
| Dermal | Not applicable. |
| Inhalation | Not applicable. |
| Eye | Not applicable. |
| Skin | Not applicable. |

Chronic Effects:

| | |
|-------------------------------|-----------------|
| Carcinogenicity | Not applicable. |
| Reproductive Toxicity | Not applicable. |
| Germ Cell Mutagenicity | Not applicable. |
| Aspiration | Not applicable. |
| STOT/SE | Not applicable. |
| STOT/RE | Not applicable. |

Section 12. Ecotoxicological Information

This product is not hazardous to the environment.

| | |
|--------------------------------------|-------------------------------------|
| Persistence and degradability | Not readily biodegradable in water. |
| Bioaccumulation | Bioaccumulation: not applicable. |
| Mobility in Soil | Soluble in water. |
| Other adverse effects | No data available. |

Section 13. Disposal Considerations

Disposal Method:

Triple rinse and dispose of according to Local Regulations.

Precautions or methods to avoid: None known.

Section 14 Transport Information

This product is NOT classified as a Dangerous Good for transport in NZ ; NZS 5433:2012

Section 15 Regulatory Information

The manufacturer has stated that this substance is NOT hazardous according to Regulation (EC) No. 1272/2008 [CLP] therefore non-hazardous as per EPA Hazardous Substances (Classification) Notice 2017

Section 16 Other Information

Glossary

| | |
|------------------|---|
| EC ₅₀ | Median effective concentration. |
| EEL | Environmental Exposure Limit. |
| EPA | Environmental Protection Authority |
| HSNO | Hazardous Substances and New Organisms. |
| LC ₅₀ | Lethal concentration that will kill 50% of the test organisms inhaling or ingesting it. |
| LD ₅₀ | Lethal dose to kill 50% of test animals/organisms. |
| LEL | Lower explosive level. |
| OSHA | American Occupational Safety and Health Administration. |
| TEL | Tolerable Exposure Limit. |
| TLV | Threshold Limit Value-an exposure limit set by responsible authority. |
| UEL | Upper Explosive Level |
| WES | Workplace Exposure Limit |

References:

1. EPA Hazardous Substances (Safety Data Sheets) Notice 2017
2. Workplace Exposure Standards and Biological Exposure Indices Nov 2017 edition.
3. Assigning a hazardous substance to a HSNO Approval (Aug 2013).
4. Transport of Dangerous goods on land NZS 5433:2012
5. HSW (Hazardous Substances) Regulations 2017

Disclaimer

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Please contact the New Zealand distributor, if further information is required.

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