



MANTISSA

PRODUCT SAFETY DATA SHEET

1. **Product Name:** VERTEX
An inorganic blend of plant nutrients

Marketed by:
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2. **Composition**
An aqueous suspension of plant nutrients.

Minimum contents w/v:

Nitrogen:	11.5%
Phosphorus:	4.8% as P ₂ O ₅
Potassium:	3.2% as K ₂ O
Magnesium:	0.5%
Sulphur:	0.6%
Manganese:	160 ppm
Iron:	556 ppm
Copper:	160 ppm
Boron:	80 ppm
Zinc:	50 ppm
Nickel:	6.4 ppm
Molybdenum:	0.3 ppm

3. **Hazards Identification**
May be irritating to eyes and skin

4. **First Aid Measures**
First aiders should prevent themselves becoming contaminated.
Seek medical attention if anyone has symptoms apparently due to inhalation, ingestion or contact.
- Eyes: Irrigate contaminated eyes immediately with clean water for 15 minutes.
- Skin: Remove contaminated clothing and wash affected area with water. Seek medical advice if any redness or irritation persists.
- Ingestion: If swallowed, drink plenty of water or milk (never give anything by mouth to an unconscious casualty) then seek immediate medical attention.
- Inhalation: Remove from exposure, obtain medical advice.

5. Fire Fighting Measures

Vertex will not burn.

Fire fighters require self-contained breathing apparatus

Extinguish fires preferably with dry chemical, foam or water spray.

Prevent entry of contaminated fire fighting water into watercourses, sewers or drains.

6. Accidental Release Measures

Wear suitable protective clothing. (see section 8 below)

Contain and cover spillage with inert absorbent material (eg, sand or earth), transfer to containers and remove them to a safe place for disposal as chemical waste.

After cleaning, flush area with plenty of water.

Prevent entry of spillage or contaminated fire fighting water into watercourses, sewers or drains.

If entry has occurred or is threatened, advise the emergency services so they may advise the Water Authority.

7. Handling & Storage

Keep cool and dry in a suitable agricultural chemical store. Do not allow to freeze. Do not store in direct sunlight.

8. Exposure controls/Personal Protection

Wear overalls, suitable protective gloves and face shield when handling the liquid.

9. Physical & Chemical Properties

Appearance:	Clear green liquid
Odour:	Odourless
Specific Gravity:	1.16-1.18 at 20°C
Viscosity:	Mobile, free-flowing
pH:	3.0

10. Stability & Reactivity

Very stable.

Stores in original container for at least two years under normal pesticide storage conditions.

Do not allow to freeze.

11. Toxicological information

Acute toxicity: Low toxicity LD₅₀ > 5,000 mg/kg. bw.

Irritancy: Mild irritant to the skin and eyes

12. Ecological Information

The product is of low toxicity to fish.

The components of the product are readily biodegradable and bio-accumulation is extremely unlikely.

13. Disposal Considerations

Dispose as chemical waste.

Do not contaminate surface waters or ditches with chemical or used containers.

Prevent entry of product into watercourses, sewers or drains.

If entry has occurred or is threatened, advise the emergency services so they may advise the Water Authority.

14. Transport Information

For Road Transport: Non hazardous.

UN Number: No UN number

Proper Shipping Name: Non hazardous

IMDG Class: N/A

CPL Packing Group: N/A

15. Regulatory Information

No statutory phrases apply

S36/37/39

Wear suitable protective clothing and gloves and eye/face protection

16. Other Information

The above information is intended to give health and safety guidance on the storage and transport of the substance or product to which it relates. It is not intended to apply to the use of the product for which purposes the product label and any appropriate technical usage literature available should be consulted and any relevant licenses, consents or approvals complied with. The requirements or recommendations of any relevant site or working procedure, system or policy in force or arising from any risk assessment involving the substance or product should take precedence over any of the guidance contained in this safety data sheet where there is a difference in the information given.

The information provided in this safety data sheet is accurate at the date of publication and will be updated as and when appropriate. No liability will be accepted for any injury loss or damage resulting from any failure to take account of information or advice contained in this safety data sheet.

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