



MANTISSA

PRODUCT SAFETY DATA SHEET

1. **Product Name:** **JUMBO**
A micronutrient for horticultural uses

Marketed by:
Mantissa Corporation Ltd, New Zealand.

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2. **Composition**
An aqueous solution of inorganic magnesium and zinc salts

Zinc content	5.7% w/v minimum
Magnesium content	3.0% w/v minimum
Sulphur (as SO ₃)	7.0% w/v minimum

3. **Hazards Identification**
IRRITATING to eyes and skin.
May be harmful if swallowed, causing vomiting or abdominal pain.

4. **First Aid Measures**
First aiders should prevent themselves from becoming contaminated.
- | | |
|-------------|---|
| Eyes: | Flush with water for 15 minutes, seek medical attention if irritation persists. |
| Skin: | Flush with water. If irritation develops, seek medical attention.. |
| Ingestion: | Seek medical attention immediately. |
| Inhalation: | Remove to fresh air. Seek medical attention immediately.. |

5. **Fire Fighting Measures**
Will not burn, but decomposes at the temperature of a fire to give fumes of sulphur oxides.
Fire fighters require breathing apparatus.
Extinguish fires preferably with dry chemical, foam or water spray.
Contain any materials used in fire fighting.

6. Accidental Release Measures

Wear suitable protective clothing.

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 firefighting 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

Handling

Read the label before use.

When using, do not eat, drink or smoke.

Wash hands and exposed skin before meals and after work.

Storage

Keep in original container, tightly closed in a safe place.

Keep away from food, drink and animal feeding stuffs.

Keep out of reach of children.

Protect from frost.

Do not contaminate ponds, waterways or ditches with chemical or used container.

Wash out container thoroughly, empty washings into spray tank and dispose of safely.

8. Exposure controls/Personal Protection

Wear suitable protective gloves and face shield when handling the concentrate.

9. Physical & Chemical Properties

Appearance: Pale brown coloured liquid

Odour: Slight seaweed odour

Specific Gravity: 1.290 – 1.300 at 20°C

pH: 6 – 8.4

10. Stability & Reactivity

Very stable.

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

This is a solid material which is partially soluble in water.

11. Toxicological Information

Acute oral toxicity: Low toxicity LD₅₀>2,000 mg/kg bw.

Acute dermal toxicity: Low toxicity LD₅₀>4,000 mg/kg bw.

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 of contaminated product, empty containers and materials used in cleaning up spills and leaks in a manner approved for this material.

After cleaning flush area with plenty of water.

Do not contaminate ponds, waterways 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

R36/38 Irritating to eyes and skin.

S7 Keep container tightly closed.

S36/37/39 Wear suitable protective clothing, gloves and eye/face protection

S49 Keep only in the original container.

S56 Dispose of this material and its container at hazardous or special waste collection point.

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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