



SAFETY DATA SHEET



1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product Name: Forcefield
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Additional Information: Info@evoponic.com

Use of Substance / Preparation: Agricultural/Horticultural use only.

2. HAZARDS IDENTIFICATION

EC Classification

Skin irritation (Category 2), H315
Serious eye damage (Category 1), H318
Eye irritation (Category 2), H319

Classification According to Directive 67/548/EEC:

Xi Irritant R36, R38, R41

3. COMPOSITION/INFORMATION ON INGREDIENTS

HAZARDOUS INGREDIENT(S)	%W/W	CAS No.	EC No.	EC Classification
Lactic acid	>30.00- <60.00 %	79-33-4	201-196-2	Xi Irritant R38, R41
Citric acid	<20.00 %	77-92-9	201-069-1	Xi Irritant R36

Full list of R phrases in section 16

4. FIRST AID MEASURES



Inhalation	Remove persons affected to fresh air. If not breathing, give artificial respiration. Consult a physician
Skin Contact	Wash off with soap and plenty of water, removing all contaminated clothing and shoes. Consult a physician.
Eye Contact	Rinse eye and under eyelids thoroughly with plenty of water for at least 15 minutes and consult a physician
Ingestion	If swallowed, never give anything by mouth to an unconscious person. Drink plenty of water. Seek medical advice immediately and show this container or label.
Further Medical Treatment	First aiders must wear impervious gloves and tightly fitting safety goggles. Avoid contact with skin and eyes. Physician's notes: Oxygen, if required. Avoid gastric leverage.

5. FIRE-FIGHTING MEASURES

Extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide to surround fire conditions
Specific Hazards	Thermal decomposition can lead to the release of irritating gases and vapours.
Unsuitable Extinguishing Media	None known.
Fire Fighting Protective Equipment	A self contained breathing apparatus and suitable protective clothing should be worn in fire conditions.
Extinguishing method	Standard procedure for chemical fires. Cool containers/tanks with water spray. Flash point <234°F. (<112°C)

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	Use personal protective equipment. Avoid contact with skin and eyes.
Environmental Exposure Controls	Do not let product enter drains
Cleaning Up Methods	Dam up. Neutralise with limestone powder, lime, soda ash. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, sawdust). Take up mechanically and collect in suitable container for disposal.



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7. HANDLING AND STORAGE

HANDLING

Avoid contact with skin and eyes. Wear impervious gloves and tightly fitting safety goggles. Do not breathe spray mist. Provide appropriate exhaust ventilation at places where spray mist is formed. Normal measures for preventive fire protection.

For precautions see section 2.2.

STORAGE

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

Storage Temperature:

Avoid temperatures >392°F (200°C) and <41°F (5°C)

Storage Life:

Stable at ambient temperatures.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Agricultural use only.



Eye Protection

Safety spectacles.



Gloves

Plastic or synthetic rubber gloves.

Other

Contaminated clothing should be thoroughly cleaned.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form	Aqueous solution.
Colour	Dark Brown Liquid
Odour	Characteristic
pH (Value)	<2.0 (20°C)
Boiling Point (°C)	No Data Available
Flash Point (°C)	No Data Available
Flammable Limits	No Data Available
Explosive Properties	No Data Available
Oxidising Properties	No Data Available
Vapour Pressure (Pascal)	No Data Available
Density (Kg/L)	1.17-1.27; 20°C
Solubility (Water)	Completely soluble
Solubility (Other)	No Data Available

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Viscosity (mPa.s)	No Data Available
Vapour Density (Air=1)	No Data Available
Relative Evaporation Rate (Ether = 1)	No Data Available

10. STABILITY AND REACTIVITY

Hazardous Reactions	Stable under normal conditions. Avoid temperatures >393°F(200°C)
Hazardous Decomposition Product(s)	Carbon oxides. Thermal decomposition can lead to products releasing irritating gases and vapours
Incompatible materials:	Oxidising agents, metals, acids and bases

11. TOXICOLOGICAL INFORMATION

None of these effects are likely to occur under normal conditions of use, provided exposure is maintained at or below the relevant occupational exposure limits.

Inhalation	Inhalation of vapours is irritating to the respiratory system. May cause throat pain and cough. Inhalation of vapours in high concentrations may cause shortness of breath (lung odema). Chronic exposure may cause dermatitis, gastrointestinal disturbance, coughing.
Skin Contact	May cause skin irritation. Prolonged exposure may produce dermatitis
Eye Contact	Severe eye irritation. Risk of serious damage to eyes. Liquid causes severe inflammation of conjunctiva and may cause severe damage of the cornea.
Ingestion	Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. May cause stomach perforation.
Local Effects	Irritating to eyes and skin. Risk of serious damage to the eye. Inhalation of mist causes irritation of the respiratory system.

12. ECOLOGICAL INFORMATION

Further Ecological information	In undiluted/concentrated form do not flush into surface water or sanitary sewer system. Avoid subsoil penetration.
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13. DISPOSAL CONSIDERATIONS

Contact supplier for specialised advice.

Regulatory information	Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point.
Recommended:	Product Disposal together with normal waste is not permitted. Special disposal is required according to local regulations. Contaminated packaging

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Empty contaminated packaging's thoroughly. They can be recycled after thorough cleaning. Packaging's that cannot be cleaned are to be disposed of as unused product.

14. TRANSPORT INFORMATION

INTERNATIONAL TRANSPORT REGULATIONS

Proper Shipping Name	Forcefield
UN No.	Not applicable
UN Pack. Group	Not applicable

SEA

IMDG Class	Not applicable
IMDG EMS	Not applicable
UN Packing group Sea	Not applicable

AIR

ICAO/IATA Class	Not applicable
UN Packing group Air	Not applicable.

EUROPEAN REGULATIONS: ROAD/RAIL

ADR/RID Class	Not applicable.
ADR/RID Item No	Not applicable

15. REGULATORY INFORMATION

This Safety Data sheet has been prepared in accordance with DIRECTIVE 67/548/EEC and CPL-REGULATON (EC) NO 1272/2008 and Annex II of EU Regulation (EC) No 453/2010 (REACH) Directive 98/24/EC and Directive 2000/39/EC

EC Classification	1999/45/EC Irritant
Hazard Symbol	
Precautionary Phrases	P262 – Do not get in eyes, on skin or on clothing P281- Use PPE as required
Response Phrases	P305, P531 and P338 – Rinse continuously with water for several minutes.
Hazard Phrases	H320 – Causes eye damage.



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16. OTHER INFORMATION

Information contained in this publication or as otherwise supplied to Users is believed to be accurate and is given in good faith, but it is for the Users to satisfy themselves of the suitability of the product for their own particular purpose. Micromix Plant Health Ltd gives no warranty as to the fitness of the product for any particular purpose and any implied warranty or condition (statutory or otherwise) is excluded except to the extent that exclusion is prevented by law. Micromix Plant Health Ltd accepts no liability for loss or damage (other than that arising from death or personal injury caused by defective product, if proved), resulting from reliance on this information. Freedom under Patents, Copyright and Designs cannot be assumed.

Glossary

Full text of H-Statements referred to under sections 2 and 3.

Eye irritation

Full text of R-phrases referred to under sections 2 and 3

Xi Irritant

R36/37/38 - Irritating to eyes, skin and respiratory system.

R41 – Risk of serious damage to eyes

Further information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide.

The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Micromix Plant Health Ltd. shall not be held liable for any damage resulting from handling or from contact with the above product.

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