



## 1. IDENTIFICATION

**Product Name:** LifeForce®

**Intended Use/Restrictions of use:** Microbial biofertilizer to use through irrigation, in furrow and seed treatment application on all crops.

**Details of Supplier of SDS:** **Registration holder and Distributor:** **Manufacturer:**



Tel: +27 82 806 7596 | [www.microbial.co.za](http://www.microbial.co.za)  
Plot 220, Oudedorp, Potchefstroom, 2531

Tel: +27 18 632 0362 | [info@microbika.com](mailto:info@microbika.com)  
PO Box 1143, Lichtenburg, North West, 2740

Emergency telephone: 0861-555 777 (AfriTox 24 Hour Service)

## 2. HAZARDS IDENTIFICATION

**Classification of the Substance** CLP / GHS / Hazcom 2012 Classification: Not classified as hazardous

**Skin Contact:** Non-irritant

**Eye Contact:** Non-irritant

**Inhalation:** Not an inhalation hazard under normal conditions of use.

**Ingestion:** Low toxicity product. It is highly unlikely that a sufficient quantity would be accidentally swallowed to cause any injury.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Bacillus spp. and Brevibacillus spp. in pH buffered solution. Not Classified as hazardous

## 4. FIRST AID MEASURES

**Skin Contact:** Wash exposed skin with soap and water.

**Eye Contact:** Flush thoroughly with water for 15 minutes. If any irritation persists seek medical attention.

**Inhalation:** Not an inhalation hazard under normal conditions of use.

**Ingestion:** Drink water, do not induce vomiting. Seek medical attention.

**Advice to Physician:** Symptomatic treatment

## 5. FIRE-FIGHTING MEASURES

**Type of Material:** Non-combustible liquid.

**Extinguishing Media:** This product is not flammable or combustible. If caught in a fire, use media appropriate for surrounding fire.

**Special Exposure Hazards:** This product does not burn freely. Responders should take into consideration the hazardous risk associated with responding to a fire in the area where the material may be stored or handled

**Special Protective Equipment:** Normal firefighting bunker gear.



### 6. ACCIDENTAL RELEASE MEASURES

<b>Personal Precautions:</b>	Use protective clothing, gloves, safety goggles and boots. Do not swallow.
<b>Environmental Precautions:</b>	Avoid disposal of large amounts into drains, surface water or groundwater.
<b>Disposal Method(s):</b>	Carefully clean up spilled material and wash exposed area with soap and water. Dispose material into suitable container, within local regulations.

### 7. HANDLING AND STORAGE

<b>Handling Precautions:</b>	Follow Biosafety Level 1 procedures. Do not eat or drink while handling the product. Wash exposed skin with soap and water after handling this product.
<b>Storage Conditions:</b>	Store in accordance with package instructions. Do not freeze. Store in a cool, dry and dark place.

### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

<b>Control Parameters:</b>	Standard precautionary measures for handling chemicals should be observed.
<b>Exposure Controls:</b>	
Eye / face protection	Use safety goggles.
Skin protection	Use protective clothing & gloves.
Respiratory protection	No specific recommendation.
Thermal hazards	None.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>General Information:</b>	
Appearance:	Liquid
Colour:	Slightly yellow cloudy colour
Smell:	No significant odour
Formulation Type:	Liquid (LQ)
<b>Storage Stability:</b>	Store at room temperature. Minimize temperature fluctuations
<b>Shelf Life:</b>	18 months at room temperature.
<b>Bulk Density:</b>	1000 kg/m <sup>3</sup>
<b>Flammability:</b>	Non-flammable
<b>Flash Point:</b>	Not applicable
<b>pH:</b>	pH 7
<b>pH of 1% Aqueous Dilution:</b>	pH 7
<b>Oxidizing Properties:</b>	Non-oxidizing



Corrosiveness:	Non-corrosive
Water Content:	97%
Solubility in Water:	100%
Foaming:	Not applicable
Particle size:	Not applicable
Volatility:	Non-volatile
Viscosity:	Not applicable

### 10. STABILITY AND REACTIVITY

Stability:	Stable
Conditions to Avoid:	Avoid very low pH (<3) and very high pH (>9)
Materials to Avoid:	Do NOT mix with any agrochemicals, bactericides, antibiotics or sterilants, without consulting with your chemical distributor, consultant or the registration holder.
Hazardous Decomposition Products:	None known

### 11. TOXICOLOGICAL INFORMATION

Acute Oral Toxicity:	None known,
Eye Irritation:	Non-toxic natural bacteria
Skin Irritation:	
Acute Pulmonary:	Not determined
Acute Intra-peritoneal:	Not determined
Intravenous:	Not determined
Chronic Effects:	None of the components is known as carcinogenic; does not contain dangerous goods. Not classified by NTP, IARC or OSHA. Non infective and not pathogenic.

### 12. ECOLOGICAL INFORMATION

Environmental Behaviour:	Bacillus spp. are non-toxic natural bacteria.
Mobility and Bio-accumulation potential:	Not determined
Ecotoxic Effects:	Not determined
General Information:	No acute or chronic effects are known.

### 13. DISPOSAL CONSIDERATIONS

Precautions:	None of the ingredients raise concern for the environment.
Disposal of Product:	Unwanted product may be safely disposed of in a land-fill or discarded as non-hazardous waste in accordance with local regulations.

### 14. TRANSPORT INFORMATION



Road/rail:	Not classified as dangerous in the meaning of transport regulations.
IMDG:	Not classified as dangerous in the meaning of transport regulations.
ICAO:	Not classified as dangerous in the meaning of transport regulations.
ADR:	Not classified as dangerous in the meaning of transport regulations.

### 15. REGULATORY INFORMATION

Supply Classification:	None
Hazard Symbols:	None
Risk Phrases:	None
Safety Recommendations:	<p>Keep out of reach of children, uninformed persons and animals.</p> <p>Wear protective gloves.</p> <p>Do not swallow.</p> <p>To avoid risks to human health and the environment, comply with the instructions for use.</p>

### 16. OTHER INFORMATION

Recommended Use:	Microbial biofertilizer for use as a foliar, in furrow and seed treatment application on all crops.
Further Information:	Product classified and safety datasheet produced according to GHS directives.

*The information contained in this SDS was compiled using the latest and most reliable information available to Microbika. The data is based on the current expertise and presents the health, safety and environmental aspects of this product. They form no guarantee of product properties. Recommendations presented in this SDS apply only to the product as originally supplied. If other ingredients are used in the processing of this product, the recommendations for the use and handling of that product must be verified.*

*This document contains important information in order to ensure the safe storage, handling and use of this product. The information in this document must be brought to the attention of the safety/health/environmental advisor within your organisation. The information in this document must be made known to everyone whose work involves this product.*

