



**MICROBIKA™**  
— quality + consistency —

## 1. IDENTIFICATION

<b>Product Name:</b>	BiopHilm™
<b>Intended Use/Restrictions of use:</b>	BiopHilm™ is a polymer-based protector recommended for products containing non-spore forming microbes e.g. Rhizobia, Pseudomonas, etc.
<b>Details of Supplier of SDS:</b>	Microbika P.O. Box 3253 Lichtenburg, 2740, South Africa E-mail: info@microbika.com Emergency telephone: 0861-555 777 (AfriTox 24 Hour Service)

## 2. HAZARDS IDENTIFICATION

<b>Classification of the Substance</b>	CLP / GHS / Hazcom 2012 Classification: Not classified as hazardous
<b>Skin Contact:</b>	Non-irritant
<b>Eye Contact:</b>	Non-irritant
<b>Inhalation:</b>	Not an inhalation hazard under normal conditions of use.
<b>Ingestion:</b>	Low toxicity product. It is highly unlikely that a sufficient quantity would be accidentally swallowed to cause any injury.

## 2. COMPOSITION/INFORMATION ON INGREDIENTS

Gel-Forming Polymer (0.5% - 1.5%), Buffer salts ( $\pm 1\%$ ) in aqueous solution. All ingredients are classified as non-hazardous.

## 4. FIRST AID MEASURES

<b>Skin Contact:</b>	Wash exposed skin with soap and water.
<b>Eye Contact:</b>	Flush thoroughly with water for 15 minutes. If any irritation persists seek medical attention.
<b>Inhalation:</b>	Remove person to fresh air. Get medical attention if any signs of sensitization (e.g. difficult breathing, chest pain, headache, and flu like symptoms) occur.
<b>Ingestion:</b>	Drink water, do not induce vomiting. Seek medical attention.

## 5. FIRE-FIGHTING MEASURES

<b>Type of Material:</b>	Non-combustible liquid.
<b>Extinguishing Media:</b>	This product is not flammable or combustible.
<b>Special Exposure Hazards:</b>	This product does not burn freely
<b>Special Protective Equipment:</b>	Wear chemical protections suit, suitable gloves and boots, and self-contained breathing apparatus.



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## 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 wash exposed area with soap and water. Dispose material into suitable container, within local regulations.

## 7. HANDLING AND STORAGE

<b>Handling Precautions:</b>	Keep out of reach of children, uniformed persons and animals. May cause slight eye irritation. May cause allergic reactions in sensitive persons. Wash hands with soap and water before eating, drinking or smoking. Destroy empty bag and do not use for any other purpose. Prevent contamination of food, feed, drinking water and eating utensils
<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>	
<b>Appearance:</b>	Liquid
<b>Colour:</b>	Slightly light grey transparent mixture
<b>Smell:</b>	No Significant odour
<b>Formulation Type:</b>	Liquid (LQ)

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<b>Storage Stability:</b>	Store at a constant temperature between 8 and 24°. Do not freeze. Keep out of direct sunlight.
<b>Shelf Life:</b>	24 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 6-7
<b>pH of 1% Aqueous Dilution:</b>	pH 6-7
<b>Oxidizing Properties:</b>	Non-oxidizing
<b>Corrosiveness:</b>	Non-corrosive
<b>Water Content:</b>	>85%
<b>Solubility in Water:</b>	Not applicable
<b>Foaming:</b>	Not applicable
<b>Particle size:</b>	Not applicable
<b>Volatility:</b>	Non-volatile
<b>Viscosity:</b>	Not applicable

## 10. STABILITY AND REACTIVITY

<b>Stability:</b>	This product is stable for 18 months when stored according to product instructions.
<b>Conditions to Avoid:</b>	Keep out of direct sunlight
<b>Materials to Avoid:</b>	Do not use for other legumes except as indicated
<b>Hazardous Decomposition Products:</b>	None known

## 11. TOXICOLOGICAL INFORMATION

<b>Acute Oral Toxicity:</b>	Data not available
<b>Eye Irritation:</b>	Data not available
<b>Skin Irritation:</b>	Data not available
<b>Acute Pulmonary:</b>	Data not available
<b>Acute Intra-peritoneal:</b>	Data not available
<b>Intravenous:</b>	Data not available
<b>Chronic Effects:</b>	Data not available

## 12. ECOLOGICAL INFORMATION

<b>Environmental Behaviour:</b>	Not known to be hazardous to the environment
<b>Mobility and Bio-accumulation potential:</b>	Not applicable



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<b>Ecotoxic Effects:</b>	Not known to have ecotoxic effects
<b>General Information:</b>	No acute or chronic effects are known.

### 13. DISPOSAL CONSIDERATIONS

<b>Precautions:</b>	None of the ingredients raise concern for the environment.
<b>Disposal of Product:</b>	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

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

### 15. REGULATORY INFORMATION

<b>Supply Classification:</b>	None
<b>Hazard Symbols:</b>	None
<b>Risk Phrases:</b>	None
<b>Safety Recommendations:</b>	Keep out of reach of children, uniformed persons and animals. May cause slight eye irritation. May cause allergic reactions in sensitive persons. Wash hands with soap and water before eating, drinking or smoking. Destroy empty bag and do not use for any other purpose. Prevent contamination of food, feed, drinking water and eating utensils.

### 16. OTHER INFORMATION

<b>Recommended Use:</b>	BiopHilm™ is a polymer-based protector recommended for products containing non-spore forming microbes e.g. Rhizobia, Pseudomonas, etc.
<b>Further Information:</b>	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.*