About us

HYGROTECH’S HISTORY
Hygrotech was founded in 1984 and originated from a company called Roode Lyon which was well known in the vegetable seed and agricultural industries of South Africa. Hygrotech pioneered the development of F1 hybrids in the South African vegetable industry.

Hygrotech offers Vegetable, Grass and Pasture seeds, adjuvants, growth stimulants, seedling systems (seed trays, growing medium and sowing machines), fertilisers, foliar feeds, biological products, plant manipulators and mechanical implements – in short many of the necessities for the modern vegetable farmer, and agriculture in Southern Africa.

Hygrotech a “one stop” service to more than 4 000 clients throughout South Africa.

FertAgChem a division of Hygrotech was launched in 2011, the main purpose of the division is research and development of softer agricultural chemicals, another innovative name:

**FERT - Fertiliser  AG - Agricultural  CHEM - Chemicals**
What makes NU-FILM-P and NU-FILM-17 different? Disturbing the efficacy of the chemicals applied.

The spreading action of the stickers, NU-FILM-P and NU-FILM-17 should not be confused with wetting agents. It is an accepted fact that good wetters have very little or no sticking ability.

Can stickers also be wetters? Yes. Spreaders are wetters, but they can easily be distinguished from each other by the amount that they reduce the surface tension of a spray mix. True wetters reduce the surface tension of water many times more efficiently than spreaders and can make a volume of water spread further on a flat surface.

What about volatile remedies? Because of the fact that all of Miller’s soft film stickers encapsulate the added remedy it makes good sense to use them with volatile formulations. NU-FILM-P and NU-FILM-17 will reduce the loss of chemicals through volatilisation while enhancing their efficacy.

Are NU-FILM-P and NU-FILM-17 harmful to the environment? No. Being organic compounds derived from natural pine resin and because they biodegrade over time they have no long-term or adverse effects on the environment.

Can NU-FILM-P and NU-FILM-17 be used with systemic insecticides? Yes. Being completely natural products and non-toxic they actually extend the life of biological insect control organisms such as BT’s ( Bacillus thuringiensis).

Can NU-FILM-P and NU-FILM-17 be used with biological remedies? Yes. NU-FILM-P and NU-FILM-17 actually soften and bond with the plant’s cuticle tissue. Systemic remedies and foliar feeds, when used with these stickers are easily translocated through the cuticle and into the plant tissue.

Many remedies take a number of days to enter the plant tissue and in these cases it is important that NU-FILM-P and / or NU-FILM-17 be used.

How do Pinolene based stickers function? These stickers form a soft, pliable film that bonds with the waxy surface of plant material. This forms a bridge for the chemicals to either stick to or move into the plant tissue. Only the outer layer that is directly in contact with the atmosphere ever hardens. This layer acts as a skin that is slowly degraded through de-polymerisation over an extended period.

Can NU-FILM-P and NU-FILM-17 be used with systemic remedies? Yes. NU-FILM-P and NU-FILM-17 can enhance the efficacy of systemic remedies. The spreading action of the stickers encapsulates the added remedy and allows it to come in direct contact with the plant’s cuticle and to be translocated into the plant tissue.

How do Pinolene based stickers function? These stickers form a soft, pliable film that bonds with the waxy surface of plant material. This forms a bridge for the chemicals to either stick to or move into the plant tissue. Only the outer layer that is directly in contact with the atmosphere ever hardens. This layer acts as a skin that is slowly degraded through de-polymerisation over an extended period.

What about re-wetting after application? The active ingredient Pinolene once it has set has no rewetting characteristics. Rain, dew and irrigation can easily wash away the film layers. These stickers are designed to remain active on the plant’s surface for an extended period when wetting agents have been used and then running off the target area.

What is the sticker / wetter story? Stickers are agricultural adjuvants that are used in conjunction with the majority of agricultural remedies with the sole purpose of enhancing the action and efficacy of the remedy being applied.

How do stickers work? Stickers are normally sticky substances that once they have dried on plant tissue bond the agricultural remedies to the plant’s surface without disturbing the efficacy of the chemicals applied.

What makes NU-FILM-P and NU-FILM-17 different? Nu Film stickers are organic Pinolene based terpinoid formulations and because of their similarity to other plant waxes, actually bond with the waxy leaf and stem surface of plants. This similarity gives these stickers their excellent sticking ability while they also reduce the possibility of the remedies becoming phytotoxic.

What are NU-FILM-P and NU-FILM-17 harmful to the environment? No. Being organic compounds derived from natural pine resin and because they biodegrade over time they have no long-term or adverse effects on the environment.

What are wetters? Wetters are adjuvants that reduce the surface tension of the water enhancing the wetter water.

This action theoretically increases the contact between the plant tissue and the spray mixture applied. When using wetters the amount of water applied per unit area of leaf cover is critical. Wetters make an application more sensitive to run off from the target area.

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SUSTAIN® is an Ultra-Violet light protector adjuvant used with soil applied herbicides, insecticides and fungicides to protect the agro-chemicals against UV light breakdown, volatilization and vertical/horizontal leaching because of too much water.

Increasing the chemical deposits on sprayed area resulting in that the herbicide does not breakdown by ultra-violet light and does not leach away from the target area in the soil.

SUSTAIN® provides:
- Ultra-violet light (sunlight) protection of the pesticides
- Reduced crop injury
- Minimized vertical and horizontal leaching
- Reduced volatility

Miller Chemicals have produced a data basis of the products with which SUSTAIN® have showed to be a good combination for protection in sunny and wet conditions.

Products like 2,4 D (volatile), the triazines (Atrazine and Simazine (leaching), imidachloprid (ultra-violet light), the acetalinides (acetochlor and metalochlor) and other products are included in this data basis.
COPPER COUNT-N
Reg No. L2602 Act No. 36 of 1947

LIQUID FUNGICIDE
A copper containing contact fungicide solution for the control of diseases as indicated.

ACTIVE INGREDIENT:
Copper ammonium acetate ......................................................................................................................................316 g/L
(Copper equivalent 93 g/L)

LIQUICOP (Exclusive by WENKEM)
Reg No. L5586 Act No. 36 of 1947

LIQUID FUNGICIDE
A copper containing contact fungicide solution for the control of diseases as indicated.

ACTIVE INGREDIENT:
Copper ammonium acetate ......................................................................................................................................316 g/L
(Copper equivalent 93 g/L)

LEAFGUARD
Reg No. L7803 Act No. 36 of 1947

FUNGICIDE GROUP CODE 33
A systemic water soluble liquid fungicide for the control of diseases caused by Oomycetes on various crops, as listed in the directions for use.

ACTIVE INGREDIENT:
Potassium phosphite .......................................................................................................................................................560 g/L
(418 g/kg)
Phosphorus Acid Equivalent ..............................................................................................................................................400 g/L
(300 g/kg)

HYGROPHOS 400
Reg No. L7949 Act No. 36 of 1947

A liquid systemic water soluble fungicide for the control of downy mildew in grape vines.

ACTIVE INGREDIENT:
Potassium phosphite .......................................................................................................................................................586 g/L
(435 g/kg)
Phosphorus Acid Equivalent ..............................................................................................................................................400 g/L
(300 g/kg)
FUNGICIDES & DISINFECTANTS

SPOREKILL®
Reg No. L7115
Reg No. ACT29GNR52927555/070/210
Act No. 36 of 1947
Compulsory Specification for disinfectants and detergent-disinfectants

FUNGICIDE GROUP CODE NC
A soluble concentrate contact bactericide and fungicide for the control of the diseases mentioned on the crops listed as well as a contact active liquid agricultural disinfectant/plant sanitizer, active against pathogenic micro-organisms/bacteria.

ACTIVE INGREDIENT:
Didecyldimethylammonium chloride ................................................................. 120 g/L
(Quaternary ammonium compound)

QA KILL
Reg No. ACT29GNR529243642040/344
Compulsory Specification for disinfectants and detergent-disinfectants

A contact active liquid agricultural disinfectant / plant sanitizer active against pathogenic micro-organisms / bacteria.

ACTIVE INGREDIENT:
Didecyldimethylammonium chloride ................................................................. 150 g/L
(Quaternary ammonium compound)

SPORE-ATTACK
Reg No. L8178
Reg No. ACT29GNR52927555/070/210-2
Act No. 36 of 1947
Compulsory Specification for disinfectants and detergent-disinfectants

A soluble concentrate contact bactericide and fungicide for the control of the diseases mentioned on the crops listed as well as a contact active liquid agricultural disinfectant/plant sanitizer, active against pathogenic micro-organisms/bacteria.

ACTIVE INGREDIENT:
Didecyldimethylammonium chloride ................................................................. 120 g/L
(Quaternary ammonium compound)

WENKILL
(Exclusively by WENKEM)
Reg No. ACT29GNR529243642040/344-1
Compulsory Specification for disinfectants and detergent-disinfectants

AGRICULTURAL DISINFECTANT/PLANT SANITIZER
A contact active liquid agricultural disinfectant / plant sanitizer active against pathogenic micro-organisms / bacteria.

ACTIVE INGREDIENT:
Didecyldimethylammonium chloride ................................................................. 150 g/L
(Quaternary ammonium compound)

MEGACIDE™
Reg No. L7126
Act No. 36 of 1947
FUNGICIDE GROUP CODE M7
A soluble concentrate fungicide for control of post-harvest decay in citrus (Green and Blue moulds & Sour rot) and tomatoes (Rhizopus rot & Sour rot).

ACTIVE INGREDIENT:
Guazatine (guanidine) .................................................................................... 210 g/L

AMMONIUM SULPHATE-BASED ADJUVANTS

AS-SISTANCE
Reg No. L8015
Act No. 36 of 1947

BUFFERING AGENT | WETTING & SPREADING AGENT | HUMECTANT AGENT
A liquid ammonium sulphate based adjuvant for use with glyphosate and sulfosate herbicides.

ACTIVE INGREDIENT:
Ammonium sulphate .................................................................................. 520 g/L

WEN-UP (Exclusively by WENKEM)
Reg No. L8190
Act No. 36 of 1947

A liquid ammonium sulfate based adjuvant for use with glyphosate and sulfosate herbicides.

ACTIVE INGREDIENT:
Ammonium sulphate complex ..................................................................... 520 g/L
BUFFERS

SUREBUFF
Reg No. L6539
Act No. 36 of 1947
A water soluble acidifier with buffering properties for use with alkaline sensitive agricultural chemicals.

ACTIVE INGREDIENT:
Acidifier, Buffer .......................................................................................................................... 480 g/L

AQUA pH
Reg No. L8332
Act No. 36 of 1947
A water quality improving agent for use with contact and systemic insecticides, fungicides, herbicides and foliar feeds.

ACTIVE INGREDIENT:
Acidifying Agents ............................................................................................................... 390 g/Kg

WENBUFF (Exclusive by WENKEM)
Reg No. L9199
Act No. 36 of 1947
A water soluble acidifier with buffering properties for use with alkaline-sensitive agricultural chemicals.

ACTIVE INGREDIENT:
Acidifier, Buffer .......................................................................................................................... 480 g/L

WENBUFF PREMIUM (Exclusive by WENKEM)
Reg No. L9200
Act No. 36 of 1947
A concentrated liquid adjuvant used for the optimising of spray tank pH, increasing the compatibility of various pesticides and foliar feeds when applied in cocktails while also acting as a wetting agent

ACTIVE INGREDIENT:
Alkylaryl Polyoxyethylene - Glycol Phosphate ester.................................................................................................................85 g/L
Organic acid buffer system ......................................................................................................................................................497 g/L

HYGROBUFF 4
Reg No. L5512
Act No. 36 of 1947
A concentrated liquid adjuvant used for the optimising of spray tank pH, increasing the compatibility of various fungicides, pesticides and foliar feeds when applied in cocktails while also acting as a wetting agent.

ACTIVE INGREDIENT:
Alkylaryl Polyoxyethylene - Glycol Phosphate ester .................................................................................................................................................85 g/L
Organic acid buffer system ......................................................................................................................................................497 g/L

SEEDLING SYSTEMS

HYGROMIX • Excellent water holding capacity • Low risk of disease infection • Good air fill porosity (AFP) versus water holding capacity • Product consistency • Constant pH • Light weight growing medium • Balanced nutrition • Minimum stress at transplanting

HYGROMIX T • All the characteristics of Hygromix, plus the following • Additional root development • Suppression of certain pathogenic fungi

HYGROMIX BIO CHARGE • All the characteristics of Hygromix, plus the following: • Additional root development • Suppression of certain pathogenic bacteria • Suppression of fungus gnats larvae

Potting Mix is suitable for small pots and trays, also for repotting in bigger pots and containers. Use Potting Mix for soil improvement in the garden and for use as a grow bag for vegetables outside or in the greenhouse. The mix suits the needs of most loved home plants: flowers, green plants and vegetables. It consists of high quality neutralised fine peat with wetting agent and starter fertiliser.

CHARACTERISTICS
pH .................................................................................................................................................. Neutral
Structure ........................................................................................................................................... Fine
EC .................................................................................................................................................. 0.7 mS
Packages ........................................................................................................................................ Bags: 10, 20, 50, 70 L
Minibales: 25, 50 L
SUREMIX
Reg No. L7659
Act No. 36 of 1947
A concentrated liquid adjuvant to improve spray tank compatibility of pesticides, to lower the pH of spray tank water and also functioning as a wetting agent.

ACTIVE INGREDIENT:
Alkylaryl Polyoxyethylene Glycol Phosphate Ester .................................................................780 g/L

MIXING SEQUENCE
OF AGRICULTURAL CHEMICALS

Suremix
↓
Buffer
↓
Soluble Sachets
↓
WG: Water Dispersible Granules
↓
WP: Wettable Powder
↓
EC: Emulsifiable Concentrate
↓
SC: Suspension Concentrate
↓
SL: Soluble Concentrate
↓
Sticker
↓
Mist-Control
↓
Surebuff/Hygrobuff 4

Granular/Powder foliar feed

Flowable foliar feed

Copper Count-N

Nu-Film P/17
### HYGROPLEX D
Reg No. B4019

High quality soluble Chelated micro-element mixture with Fe in the DTPA form.

**ACTIVE INGREDIENT:**

<table>
<thead>
<tr>
<th>Element</th>
<th>Amount (g/kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iron (Fe)</td>
<td>72.0</td>
</tr>
<tr>
<td>Zinc (Zn)</td>
<td>9.5</td>
</tr>
<tr>
<td>Copper (Cu)</td>
<td>2.5</td>
</tr>
<tr>
<td>Boron (B)</td>
<td>25.0</td>
</tr>
<tr>
<td>Molybdenum (Mo)</td>
<td>2.5</td>
</tr>
</tbody>
</table>

### HYGROFERT Cu14
Reg No. B3151

Copper EDTA chelate. **HYGROFERT Cu 14** is used for the prevention and cure of copper deficiencies in most agricultural and horticultural crops.

**ACTIVE INGREDIENT:**

<table>
<thead>
<tr>
<th>Element</th>
<th>Amount (g/kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copper (Cu)</td>
<td>140</td>
</tr>
</tbody>
</table>

### HYGROFERT Fe13
Reg No. B3149

Iron EDTA chelate. **HYGROFERT Fe13** is used for the prevention and cure of iron deficiencies in most agricultural and horticultural crops by foliar spraying and by soil application where the soil pH (H2O) is 6 or less.

**ACTIVE INGREDIENT:**

<table>
<thead>
<tr>
<th>Element</th>
<th>Amount (g/kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iron (Fe)</td>
<td>130</td>
</tr>
</tbody>
</table>

### HYGROFERT FeDP
Reg No. B3150

Iron DTPA chelate. **HYGROFERT FeDP** is used for the prevention and cure of iron deficiencies in most agricultural and horticultural crops by soil application in marginally alkaline soils up to pH (H2O) 7.5.

**ACTIVE INGREDIENT:**

<table>
<thead>
<tr>
<th>Element</th>
<th>Amount (g/kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iron (Fe)</td>
<td>110</td>
</tr>
</tbody>
</table>

### HYGROFERT Mn
Reg No. B3153

Manganese EDTA Chelate. **HYGROFERT Mn** is used for the prevention and cure of manganese deficiencies in most agricultural and horticultural crops.

**ACTIVE INGREDIENT:**

<table>
<thead>
<tr>
<th>Element</th>
<th>Amount (g/kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manganese (Mn)</td>
<td>130</td>
</tr>
</tbody>
</table>

### HYGROFERT Zn 14
Reg No. B3148

Iron EDTA Chelate. **HYGROFERT Zn 14** is used for the prevention and cure of zinc deficiencies in most agricultural and horticultural crops.

**ACTIVE INGREDIENT:**

<table>
<thead>
<tr>
<th>Element</th>
<th>Amount (g/kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zinc / Sink (Zn)</td>
<td>140</td>
</tr>
</tbody>
</table>

### SPOORSpray 15
Reg No. B2157

**SPECIAL FERTILIZER**

**ACTIVE INGREDIENTS:**

<table>
<thead>
<tr>
<th>Element</th>
<th>Amount (g/kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iron (Fe)</td>
<td>104</td>
</tr>
<tr>
<td>Boron (B)</td>
<td>146</td>
</tr>
<tr>
<td>Molybdenum (Mo)</td>
<td>55</td>
</tr>
</tbody>
</table>
MILLERPlex®
Reg No. K6899  
Act No. 36 of 1947

A Kelp based crop formula. Millerplex® is a proprietary liquid fertilizer formulation containing macro-nutrients and sea plant extracts from Kelp (Ascophyllum nodosum). Foliar fertilization is intended as a supplement to a regular fertilization programme and will not, by itself provide all the nutrients normally required by agricultural crops.

ACTIVE INGREDIENTS:

- Nitrogen (N) .......................................................................................................................... 35 g/kg
- Potash (K) .................................................................................................................................. 30 g/kg
- Phosphate (P) ............................................................................................................................ 15 g/kg

ASCO-GRO
Reg No. K6714  
Act No. 36 of 1947

A proprietary liquid sea plant fertilizer (Extracts from Ascophyllum Nodosum (Kelp))

ACTIVE INGREDIENTS:

- Total Nitrogen (N) ..................................................................................................................... 2 g/kg
- Soluble Potash (K2O) .................................................................................................................. 3 g/kg
- Calcium (Ca) Chelated Calcium .................................................................................................. 1 160 mg/kg
- Molybdenum (Mo) .................................................................................................................. 30 mg/kg
- Auxin like biological activity ................................................................................................. 3.5 ppm
- Auxin precursors ...................................................................................................................... 80 ppm

FREE GRO
Reg No. B3336  
Act No. 36 of 1947

100% ORGANIC SEAWEED FOLIAR. Extracted from three species of Philippine Seaweeds

ACTIVE INGREDIENTS:

- Nitrogen (N) .......................................................................................................................... 3.11 g/L
- Potassium (K) ......................................................................................................................... 11.41 g/L
- Iron (Fe) - Chelated Iron ........................................................................................................... 11.51 mg/L
- Zinc (Zn) .................................................................................................................................. 60.15 mg/L
- Phosphorus(P) ......................................................................................................................... 1.14 g/L
- Calcium (Ca) .................................................................................................................................. 1.76 g/L
- Manganese (Mn) ..................................................................................................................... 174.22 mg/L
- Copper (Cu) .................................................................................................................................. 15.76 mg/L
- Copper (Cu) - Chelated Copper .................................................................................................. 15.20 mg/kg
- *Copper (Cu) - Chelated Copper .............................................................................................. 10 mg/kg
- *Totally chelated by EDTA (Disodium Ethylenediamine Tetra Acetate Chelate)

STIMULANTS

YIELD UP
Reg No. K6942  
Act No. 36 of 1947

An omnipotent water soluble fertilizer product to aid in crop production

ACTIVE INGREDIENTS:

- Nitrogen (N) .......................................................................................................................... 40 g/kg
- Potash (K) .................................................................................................................................. 330 g/kg
- Sulfur (S) .................................................................................................................................. 74 g/kg
- Iron (Fe) – Chelated Iron ........................................................................................................... 500 mg/kg
- Manganese (Mn) – Chelated Manganese .................................................................................. 500 mg/kg
- Zinc (Zn) – Chelated Zinc .............................................................................................................. 500 mg/kg

SUGAR EXPRESS
Reg No. K6716  
Act No. 36 of 1947

An omnipotent water soluble fertilizer product to aid in crop production

ACTIVE INGREDIENTS:

- Nitrogen (N) .......................................................................................................................... 40 g/kg
- Phosphate (P) ......................................................................................................................... 40 g/kg
- Magnesium (Mg) ..................................................................................................................... 5 g/kg
- Boron (B) ................................................................................................................................... 200 mg/kg
- Iron (Fe) – Chelated Iron ........................................................................................................... 1000 mg/kg
- Molybdenum (Mo) .................................................................................................................. 10 mg/kg
- *Copper (Cu) – Chelated Copper .............................................................................................. 10 mg/kg

ONE SPRAY
Reg No. K6896  
Act No. 36 of 1947

ACTIVE INGREDIENTS:

- Nitrogen (N) .......................................................................................................................... 35 g/kg
- Potash (K) .................................................................................................................................. 30 g/kg
- Phosphate (P) ......................................................................................................................... 15 g/kg

INERT INGREDIENTS:

- Adjuvants, surfactants, in buffered solution .............................................................................. 95.0%
- Total ........................................................................................................................................ 100.0%
PERLKA
Reg No. K 8015
Act No. 36 of 1947

PERLKA is a multifunctional and environmental friendly fertilizer. PERLKA contains 19.8% Nitrogen and 35.7% Calcium. The slow release Nitrogen supply corresponds to the natural demand of plants, plant growth is homogenous and well balanced.

Calcium promotes strong cell walls and more robust plants.

Nitrogen (N) ............................................................................................................................................... 198 g/kg
Calcium (Ca) ............................................................................................................................................. 357 g/kg

KIC-START
Reg No. K5442
Act No. 36 of 1947

KIC-START is a water soluble nutrient solution with chelated cation micro-elements which can be used as a root drench when transplanting seedlings or when establishing trees and ornamental shrubs.

Nitrogen (N) ............................................................. 220 g/L 172 g/kg Phosphorus (P) ............................................................. 60 g/L 50.85 g/kg
Potassium (K) ....................................................... 1005 g/L 852 mg/kg Manganese (Mn) ..................................................... 510 mg/L 43 mg/kg
Magnesium (Mg) ................................................... 2.5 g/L 2 g/kg Iron (Fe) ............................................................. 1005 mg/L 785 g/kg
Manganese (Mn) ..................................................... 510 mg/L 398 mg/kg Zinc (Zn) ......................................................... 510 mg/L 398 mg/kg
Copper (Cu) ........................................................... 261 mg/L 204 mg/kg Boron (B) ............................................................. 5.0 mg/L 3.9 mg/kg
Molybdenum (Mo) .................................................. 8.4 mg/L 6.6 mg/kg Auxins .............................................................. 5.0 mg/L 3.9 mg/kg

ZINC NITRATE
Reg No. B2465
Act No. 36 of 1947

HIGH QUALITY MICRO-ELEMENT MIXTURE
ZINC NITRATE solution is used as a foliar spray for the correction of zinc deficiencies in crops. ZINC NITRATE solution is compatible with most spray chemicals but not alkaline materials.

Nitrogen (N) ............................................................................... 110 g/L 89 g/kg
Calcium (Ca) .................................................................................. 10 g/L 8 g/kg
Phosphorus (P) ............................................................................ 91 g/L 71 g/kg
Magnesium (Mg) ........................................................................... 2.5 g/L 2 g/kg
Iron (Fe) ....................................................................................... 10 g/L 8 g/kg
Manganese (Mn) .......................................................................... 50.0 mg/L 38.5 mg/kg
Zinc (Zn) ...................................................................................... 50.0 mg/L 38.5 mg/kg
Copper (Cu) .................................................................................. 50.0 mg/L 38.5 mg/kg
Molybdenum (Mo) ...................................................................... 50.0 mg/L 38.5 mg/kg

MAIZE PLUS
Reg No. K6324
Act No. 36 of 1947

All cationic micro-elements are fully EDTA chelated. MAIZE PLUS is a water soluble plant feeding solution which can be applied as a foliar feed on maize to supplement existing soil nutrients.

Nitrogen (N) ............................................................. 140 g/L 118.6 g/kg Phosphorus (P) ............................................................. 60 g/L 50.85 g/kg
Iron (Fe) ................................................................. 1005 g/L 852 mg/kg Manganese (Mn) ..................................................... 510 mg/L 43 mg/kg
Zinc (Zn) ................................................................. 884 mg/L 580 mg/kg Copper (Cu) ............................................................. 510 mg/L 432 mg/kg
Boron (B) ................................................................. 470 mg/L 398 mg/kg Molybdenum (Mo) .................................................. 59 mg/L 50 mg/kg
Cytokinins ........................................................................... 10 mg/L 8.5 mg/kg

HYGRO BOOST-FLO
Reg No. K6252
Act No. 36 of 1947

MICRO-NUTRIENT MIXTURE

Nitrogen (N) ............................................................. 198 g/L 152 g/kg Manganese (Mn) ..................................................... 20.7 g/L 15.9 g/kg
Zinc (Zn) ................................................................. 50.0 g/L 38.5 g/kg Copper (Cu) ............................................................. 32.7 g/L 25.2 g/kg
Boron (B) ................................................................. 8.7 g/L 6.7 g/kg

NITROSPRAY PLUS
Reg No. K4415

Nitrogen (N) ............................................................. 220 g/L 165 g/kg Phosphorus (P) ............................................................. 90 g/L 68 g/kg
Potassium (K) ............................................................. 30 g/L 23 g/kg Iron (Fe) ............................................................. 1005 mg/L 756 mg/kg
Manganese (Mn) .......................................................... 510 mg/L 383 mg/kg
Start by building a sustainable environment with FertAgChem innovative solutions.
CALMABON LIQUID
Reg. No. K5272
Act No. 36 of 1947

<table>
<thead>
<tr>
<th>Element</th>
<th>Concentration</th>
<th>Unit</th>
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<tbody>
<tr>
<td>Nitrogen (N)</td>
<td>1144</td>
<td>g/L</td>
</tr>
<tr>
<td>Magnesium (Mg)</td>
<td>2289</td>
<td>mg/kg</td>
</tr>
<tr>
<td>Boron (B)</td>
<td>130</td>
<td>g/L</td>
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</table>

SOLU-CAL
Reg. No. K7583
Act No. 36 of / van 1947

<table>
<thead>
<tr>
<th>Element</th>
<th>Concentration</th>
<th>Unit</th>
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</thead>
<tbody>
<tr>
<td>Nitrogen (N)</td>
<td>164</td>
<td>g/kg</td>
</tr>
<tr>
<td>Calcium (Ca)</td>
<td>133</td>
<td>g/L</td>
</tr>
<tr>
<td>Molybdenum (Mo)</td>
<td>2275</td>
<td>mg/L</td>
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</table>

HYPERFEED
Reg. No. K7315
Act No. 36 of 1947

<table>
<thead>
<tr>
<th>Element</th>
<th>Concentration</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nitrogen (N)</td>
<td>55</td>
<td>g/kg</td>
</tr>
<tr>
<td>Phosphate (P)</td>
<td>56</td>
<td>g/kg</td>
</tr>
<tr>
<td>Magnesium (Mg)</td>
<td>500</td>
<td>mg/kg</td>
</tr>
<tr>
<td>Copper (Cu)</td>
<td>500</td>
<td>mg/kg</td>
</tr>
<tr>
<td>Molybdenum (Mo)</td>
<td>75</td>
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HYGROPONIC
Reg. No. K5709
Act No. 36 of / van 1947

<table>
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<tr>
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<tr>
<td>Phosphate (P)</td>
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<tr>
<td>Magnesium (Mg)</td>
<td>50</td>
<td>g/kg</td>
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<tr>
<td>Copper (Cu)</td>
<td>500</td>
<td>mg/kg</td>
</tr>
<tr>
<td>Molybdenum (Mo)</td>
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CALMABON PLUS
Reg. No. K7315
Act No. 36 of 1947

<table>
<thead>
<tr>
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<tbody>
<tr>
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<td>Magnesium (Mg)</td>
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</tr>
<tr>
<td>Molybdenum (Mo)</td>
<td>1138</td>
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HYPERFEED
Reg. No. K3774
Act No. 36 of / van 1947

<table>
<thead>
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<th>Element</th>
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<tr>
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<td>Magnesium (Mg)</td>
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<td>mg/kg</td>
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<tr>
<td>Copper (Cu)</td>
<td>500</td>
<td>mg/kg</td>
</tr>
<tr>
<td>Molybdenum (Mo)</td>
<td>500</td>
<td>mg/kg</td>
</tr>
<tr>
<td>Calcium (Ca)</td>
<td>153</td>
<td>g/L</td>
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DRIPFEED
Reg No. K2495
Act No. 36 of 1947

<table>
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<th>Element</th>
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<th>Unit</th>
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</thead>
<tbody>
<tr>
<td>Nitrogen (N)</td>
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<td>g/kg</td>
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<tr>
<td>Phosphorus (P)</td>
<td>92</td>
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<tr>
<td>Iron (Fe)</td>
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<tr>
<td>Manganese (Mn)</td>
<td>350</td>
<td>mg/kg</td>
</tr>
<tr>
<td>Zinc (Zn)</td>
<td>350</td>
<td>mg/kg</td>
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<tr>
<td>Magnesium (Mg)</td>
<td>350</td>
<td>mg/kg</td>
</tr>
<tr>
<td>Boron (B)</td>
<td>225</td>
<td>g/kg</td>
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### FOLIFEED

**Reg No. K2944**

<table>
<thead>
<tr>
<th>Nutrient</th>
<th>Amount (g/kg)</th>
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</thead>
<tbody>
<tr>
<td>Nitrogen (N)</td>
<td>0.272</td>
</tr>
<tr>
<td>Phosphorus (P)</td>
<td>0.43</td>
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<tr>
<td>Potassium (K)</td>
<td>1.138</td>
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<tr>
<td>Magnesium (Mg)</td>
<td>0.09</td>
</tr>
<tr>
<td>Boron (B)</td>
<td>0.650</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Nutrient</th>
<th>Amount (mg/kg)</th>
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</thead>
<tbody>
<tr>
<td>Iron (Fe)</td>
<td>0.520</td>
</tr>
<tr>
<td>Manganese (Mn)</td>
<td>0.300</td>
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<tr>
<td>Zinc (Zn)</td>
<td>0.360</td>
</tr>
<tr>
<td>Copper (Cu)</td>
<td>0.075</td>
</tr>
<tr>
<td>Molybdenum (Mo)</td>
<td>0.070</td>
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</table>

### POTASPRAY

**Reg No. K2247**

<table>
<thead>
<tr>
<th>Nutrient</th>
<th>Amount (g/kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nitrogen (N)</td>
<td>0.059</td>
</tr>
<tr>
<td>Potassium (K)</td>
<td>0.299</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Nutrient</th>
<th>Amount (g/kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phosphorus (P)</td>
<td>0.179</td>
</tr>
</tbody>
</table>

### FOSFASPRAY

**Reg No. K2248**

<table>
<thead>
<tr>
<th>Nutrient</th>
<th>Amount (g/kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nitrogen (N)</td>
<td>0.094</td>
</tr>
<tr>
<td>Potassium (K)</td>
<td>0.051</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Nutrient</th>
<th>Amount (g/kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phosphorus (P)</td>
<td>0.253</td>
</tr>
</tbody>
</table>

---

**HYDROGONICS**

The informed choice for growers and vegetables.

Meeting all nutritional requirements under protection and open field.

**HYDROTECH**

**SUSTAINABLE SOLUTIONS**

**HYDROGONIC** is a balanced nutrient mixture, when used together with calcium nitrate and potassium.

**HYDROGONIC** is an easy to use, uncomplicated product and is CHLORINE FREE. Application rates vary per crop and climatic region. For application rates and EC targets, contact your nearest HYDROTECH technical adviser.
A NEW GENERATION, VERSATILE ADJUVANT FOR USE WITH POST-EMERGENCE HERBICIDES

Achieve the best possible weed control under the harsh South African weather conditions

**Entreé** is a multi-component adjuvant designed to optimize the activity of post-emergence herbicides. It contains the following components:

- Methylated seed oil that increases absorption, especially through the lipophilic (waxy) parts of plants.
- Unique surfactant system that increases absorption, especially through hydrophilic (water seeking) parts of plants.

Absorption routes from leaf surface to cytoplasm

*(Ashton & Crafts, 1981)*

**ADVANTAGES**

- Entreé, in contrast to many other oil adjuvants, can be used with a wide range of herbicides including both oil soluble and water soluble products.
- Entreé has excellent absorption qualities that ensures herbicide performance, especially under marginal conditions.
- The surfactants and plant oils in Entreé ensure thorough coverage of weed leaves by spray droplets.
- The methylated seed oil contained in Entreé reduces evaporation of spray droplets, increasing the time for absorption of the herbicide.
- Scientists in the USA now regard this type of adjuvant as the standard because of the outstanding improvement in herbicide efficacy.
- Entreé contains no environmentally unfriendly chemistry and has a blue band label (caution).
- Entreé is suitable for use on plants with vertical, waxy and hairy leaf surfaces.

**RECOMMENDATIONS**

- Application rates of between 250 ml/ha & 500 ml/ha are recommended for most uses. Use the higher rates under marginal conditions or with herbicides where higher adjuvant rates are required.
- Entreé should be used with herbicides where the use of a tank-mix adjuvant is recommended.
- Always follow the mixing sequence that is recommended on the herbicide label.
- In the event of tank mixtures, always follow the recommendations of the product components to be mixed.
- The prepared spray mixture should not be left in the spray tank for an extended time period.
The use of Sporekill® as fungicide refers to the control of specific diseases on specific crops applied in specific manners. These are as follow:

<table>
<thead>
<tr>
<th>CROP</th>
<th>TREATMENT</th>
<th>CONTROL OF</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>APPLES AND PEARS</strong></td>
<td>Post-harvest application</td>
<td>Post-harvest decay caused by Penicillium expansum.</td>
<td>Dip or drench fruit after harvest or regular atmosphere storage. For not for use after controlled atmosphere storage. For best results keep fruit wet for at least 10 minutes. Keep Sporekill® concentration at the recommended rate by using Sporekill® *Test Kit.</td>
</tr>
<tr>
<td></td>
<td>Rate: 100 ml</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>AVOCADO</strong></td>
<td>Post-harvest application</td>
<td>Anthracnose, caused during washing process in dump tank by Colletotrichum gloeosporioides.</td>
<td>Dip fruit for 3-5 minutes. Use higher rate under conditions conducive to high disease pressure. Keep Sporekill® concentration at recommended rate by using Sporekill® *Test Kit.</td>
</tr>
<tr>
<td></td>
<td>Rate: 100 – 150 ml</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>CARROTS</strong></td>
<td>Pre-harvest foliar application</td>
<td>Powdery mildew (Erysiphe heraclei)</td>
<td>Apply preventively or when first disease symptoms are observed. Repeat with 7 – 10 day intervals, depending upon disease pressure. Apply as a high volume application at 300 – 500L spray mixture per hectare depending upon plant size. Ensure thorough coverage of all foliage.</td>
</tr>
<tr>
<td></td>
<td>Rate: 100 ml</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>CITRUS</strong></td>
<td>Post-harvest application</td>
<td>Green-, Blue mould and Sour rot, caused during washing process, by controlling dump tank, pre-degreening drench or high pressure washing system borne Penicillium digitatum, P. italicum, Geotrichum candidum including Imazalil-resistant Penicillium populations.</td>
<td>Dip fruit for 3-5 minutes as soon as possible after harvest. Use higher rate under conditions conducive to high disease pressure. Keep Sporekill® concentration at recommended rate by using Sporekill® *Test Kit.</td>
</tr>
<tr>
<td></td>
<td>Rate: 100 – 150 ml</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>CITRUS</strong></td>
<td>Orchard application</td>
<td>Black spot caused by Guignardia citricarpa AND Alternaria brown spot caused by Alternaria alternata</td>
<td>Apply preventatively, four full cover sprays at 25-30 days intervals. Apply first application before 15 October. Ensure thorough coverage of both foliage and fruit surfaces. Commence high volume cover sprays at first flush and repeat every 30 days until harvest. The number of applications (up to 7) is dependent on weather conditions during February – April. In wet conditions, additional applications are necessary to inhibit further infections. The reduced copper rate will contribute to drastically less fruit stippling, should copper fungicides be applied in successive sprays.</td>
</tr>
<tr>
<td></td>
<td>Rate:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tank mix: 100 ml PLUS 100 g Mancozeb* OR 100 ml PLUS 100 g Copper oxychloride OR 100 ml PLUS 100 g Copper hydroxide*</td>
<td>*Only use those products together with Sporekill® that are registered for the particular claim.</td>
<td></td>
</tr>
<tr>
<td><strong>CUCURBITS</strong></td>
<td>Trunk and branch application</td>
<td>Phytophthora trunk and branch canker (Phytophthora citrophthora)</td>
<td>Apply directly to trunk and lower affected branches with hand guns or knapsack by using 1 – 2 L of spray mixture per tree. Do not spray onto fruit if present. Repeat treatment at 3 month intervals. Please Note: The disease will not be controlled on trees of which the trunks are already 60% or more girdled by the pathogen.</td>
</tr>
<tr>
<td></td>
<td>Rate:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tank mix: 100 ml PLUS 200 g Captab</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>CUCURBITS</strong></td>
<td>Pre-harvest foliar application</td>
<td>Powdery mildew (Sphaerotheca fulginea and Erysiphe cichoracearum)</td>
<td>Apply preventively at 7-12 day intervals. Under high disease pressure, spray every 7 days and include a systemic fungicide into program. Ensure thorough coverage of both upper and lower leaf surfaces. Do not apply more than 4 times when fruit are present.</td>
</tr>
<tr>
<td></td>
<td>Rate: 100 ml</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CROP</td>
<td>TREATMENT</td>
<td>CONTROL OF</td>
<td>REMARKS</td>
</tr>
<tr>
<td>------</td>
<td>-----------</td>
<td>------------</td>
<td>---------</td>
</tr>
<tr>
<td>Grapevines</td>
<td>Propagation material application Rate: 150 ml</td>
<td>Infection of grapevine propagation material by decline and die-back pathogens such as <em>Phaeomoniella chlamydospora</em>, <em>Phaeoacremonium</em>, <em>Botryosphaeria</em> and <em>Phomopsis</em> spp.</td>
<td>Rootstock and Scion cutting treatment Immediately after cutting preparation and pre-cold storage soak for 1 hour in <em>Sporekill®</em> solution. After cold storage one day prior to grafting soak for 10 minutes. This treatment can also be done in cool-down water following hot water treatment. Pre-Plant treatment After callus, directly prior to planting, dip for 5 seconds in <em>Sporekill®</em> solution. General sanitation For disinfection of grafting equipment, tables, work surfaces, grafting sheds, callusing boxes, etc. For best results, first wash surfaces to remove dirt and then disinfect by keeping surfaces wet for 10 minutes.</td>
</tr>
<tr>
<td>Mango</td>
<td>Post-harvest application Rate: 100 – 150 ml</td>
<td>Anthracnose, caused during washing process in dump tank by <em>Colletotrichum gloeosporioides</em>.</td>
<td>Dip fruit for 3-5 minutes. Use higher rate under conditions conducive to high disease pressure. Keep <em>Sporekill®</em> concentration at recommended rate by using <em>Sporekill®</em> Test Kit.</td>
</tr>
<tr>
<td>Seed Potatoes</td>
<td>Pre-plant application Rate: 150 ml</td>
<td>Bacterial rot caused by contamination of tubers, during the washing/dip treatment process, by controlling water borne <em>Erwinia</em> spp.</td>
<td>Dip tubers for 3-5 minutes. Replace solution when water is too dirty. Treat only whole potato tubers. Keep <em>Sporekill®</em> concentration at recommended rate by using <em>Sporekill®</em> Test Kit.</td>
</tr>
<tr>
<td>Tomatoes</td>
<td>Post-harvest Rate: 150 ml</td>
<td>Sour rot, caused during washing process in dump tank by <em>Geotrichum</em> sp.</td>
<td>Dip fruit for 3 minutes. Keep <em>Sporekill®</em> concentration at recommended rate by using <em>Sporekill®</em> Test Kit.</td>
</tr>
<tr>
<td>Wine Grapes</td>
<td>Pre-harvest foliar application Rate: Tank mix: 100 ml PLUS 100 g Mancozeb OR 100 ml PLUS 250 g Copper oxychloride OR 100 ml PLUS 250 ml Copper ammonium acetate</td>
<td>Downy mildew caused by <em>Plasmopara viticola</em>.</td>
<td>Pre-blossom Apply first spray when young shoots have reached length of 10 cm. Repeat at 7 – 10 day intervals, depending upon weather conditions. Apply as a high volume application at 500 – 700 L spray mixture per hectare. Blossom to 80% Calyx fall Apply only if the blossoming period is longer than 14 days. Apply as a high volume application at 750 – 1000 L spray mixture per hectare. Post blossom Apply two more applications at 7 – 14 day intervals, depending upon weather conditions. Apply as a high volume application at 1000 – 1500 L spray mixture per hectare. The reduced copper rate, will contribute to less copper residues accumulating in the environment.</td>
</tr>
</tbody>
</table>

**PLEASE NOTE:**

Compliance with withholding periods (as indicated on label) and the other applications will ensure that residues do not exceed South African Maximum Residue Limits, but the import tolerances of other countries might possibly be exceeded. If the crop to be treated is intended for export, consult the relevant importer or exporting body regarding the use of this product, Maximum Residue Limits and recommended withholding periods.

**ALWAYS REFER TO THE LABEL AND BROCHURE ACCOMPANYING CONTAINER BEFORE USING THE PRODUCT**

- *Sporekill®* compatibility with other agricultural chemicals can be influenced by factors such as quality of dilution water and formulations of other products. In the past many combinations have been tested for physical compatibility. Grower comments regarding compatibility have also been noted. Contact ICA International Chemicals for more information on this. If any doubt, ALWAYS do a jar test.
- *Sporekill®* is generally incompatible with concentrated anionic agricultural chemicals.
- *Sporekill®* has wetting capabilities, increasing contact with the target area when applied in a spray tank mix.
- *Sporekill®* stability and efficacy is not influenced by pH or hardness of water.
- *Sporekill®* in solution is non-volatile and not corrosive.
**DISINFECTING AREA** | **RATE (per 100L water)** | **REMARKS** |
---|---|---|
POST-HARVEST: Dipping tank for crops such as: | | |
Apple, Asparagus, Avocado, Broccoli, Brussels, Butternut, Cauliflower, Citrus, Guava, Leek, Mango, Melon, Papaya, Pear, Pepper, Persimmon, Potato, Pumpkin, Sweet corn, Sweet potato, Tomato | 100 – 150 ml | Dip for 2 – 5 minutes. When foaming under heavy agitation occurs, use a defoaming product. Replace the Sporekill® solution as soon as it gets too dirty. Keep Sporekill® concentration at recommended rate by using Sporekill® * Test Kit. |
Cherry | 25 ml | Dip for a maximum of 4 minutes. Keep Sporekill® concentration at recommended rate by using Sporekill® * Test Kit. |
Macadamia nut | 300 ml | Dip and keep Sporekill® concentration at recommended rate by using Sporekill® * Test Kit. |
Flower bulbs for storage | 100 – 150 ml | Use as an initial knock-out action together with a registered fungicide for prolonged action. |
Shower application: | | |
Carrot | 50 ml | Maximum application time is 2 minutes. Keep Sporekill® concentration at recommended rate by using Sporekill® * Test Kit. |

**WATER:**

<table>
<thead>
<tr>
<th>WATER:</th>
<th>RATE</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse wet-walls</td>
<td>10 ml</td>
<td>First time application to disinfect wet-walls: give a shock treatment of 100 - 200 ml per 100 L water. Then at recommended dosage.</td>
</tr>
<tr>
<td>Spray-tanks</td>
<td>10 ml</td>
<td>For optimum results to dramatically reduce bacterial and fungi counts, including coliforms and E. coli in the water, allow 20 minutes Sporekill® exposure time.</td>
</tr>
<tr>
<td>Irrigation water for use in nurseries, greenhouses, misting systems, etc.</td>
<td>2 ml</td>
<td>Rinse irrigation pipes frequently when dosing for the first few times. The dirt/algae/organic matter will be dislodged and may clog the drippers or spitters. Sporekill® can be used in fertigated water. <strong>Take note:</strong> The cleaner the water to be treated the better the results.</td>
</tr>
<tr>
<td>Cut flower containers</td>
<td>150 ml</td>
<td>The solution can be used 7-10 days if kept clean. Do not keep flowers in solution for longer than 72 hours.</td>
</tr>
</tbody>
</table>

**GROWING MEDIUM**

<table>
<thead>
<tr>
<th>EQUIPMENT</th>
<th>FOOTBATHS</th>
</tr>
</thead>
<tbody>
<tr>
<td>(inert or non-organic)</td>
<td>1L</td>
</tr>
<tr>
<td>(pruning shears, ploughs, etc.)</td>
<td>1L</td>
</tr>
<tr>
<td></td>
<td>1L</td>
</tr>
</tbody>
</table>

**COLD ROOMS, PACKING SHEDS AND GREENHOUSES**

| HARD SURFACES (seedtrays, picking bins, etc.) | 100 - 200 ml | First remove all organic matter from surfaces. Keep wet with Sporekill® solution for at least 10 minutes for best results. |

**PURPOSE:**
- Disinfecting water
- Disinfecting fruit/vegetable surfaces
- Prohibiting build-up of micro-organisms in dipping tank and circulation systems

**BENEFITS:**
- Kills broad spectrum of micro-organisms (including those compromising food safety)
- Non-volatile and non-corrosive
- Sporekill® stability and efficacy is not influenced by pH or hardness of water
- Sporekill® formulation complies with SANS1053 (Disinfectants and detergent-disinfectants for use in the food industry)
- Sporekill® Test Kit allows for monitoring and accuracy

**PLEASE NOTE:**

The disinfectant registration of Sporekill® is according to relevant South African legislation (Compulsory Specification for disinfectants and detergent-disinfectants). However if any edible crop to be treated is intended for export, consult the relevant importer or exporting body regarding legislation of the destination country with regards to the use of this product, Maximum Residue limits, etc.

ALWAYS REFER TO THE LABEL AND BROCHURE ACCOMPANYING CONTAINER BEFORE USING THE PRODUCT
Sporekill® can be applied as a plant sanitiser to decontaminate the foliage without leaving any residual activity. When Sporekill® is used as a foliage spray to sanitise plant surfaces, apply at a rate of 500 – 1500 L spray mixture per hectare, depending on plant size. Higher volumes per hectare are necessary for tree crops. Ensure that both upper and lower leaf surfaces are treated.

**IMPORTANT:**
Sporekill® should be incorporated into a normal fungicide program for adequate disease control.

Sporekill® compatibility with other agricultural chemicals can be influenced by factors such as quality of dilution water and formulations of other products. In the past many combinations have been tested for physical compatibility. Grower comments regarding compatibility have also been noted. Contact ICA International Chemicals for more information on this. If any doubt, ALWAYS do a jar test. Sporekill® is generally incompatible with concentrated anionic agricultural chemicals.

### DISINFECTING AREA

<table>
<thead>
<tr>
<th>THE FOLLOWING CROPS BY MEANS OF OVERHEAD SPRAYS:</th>
<th>RATE (per 100 L water)</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asparagus, Bean (dry &amp; green), Brassica, Carrot, Celery, Cucurbit, Leek, Lettuce, Onion, Paprika, Pea, Pepper, Potato, Spinach, Strawberry, Tomato</td>
<td>50 – 100 ml</td>
<td>First application after transplant of seedlings or 6 weeks after seeding. Apply at 10 day intervals. An application of 100 ml per 100 L water prior to harvest will also disinfect foliage surface of pathogenic organisms such as E. coli.</td>
</tr>
<tr>
<td>Flowers: Cut flowers: Carnation, Chrysanthemum, Gypsophila, Outdoor Roses</td>
<td>50 - 100 ml</td>
<td>First application after transplant of seedlings. Apply at 7 - 10 day intervals.</td>
</tr>
<tr>
<td>Greenhouse grown roses</td>
<td>50 ml</td>
<td>Apply at 7 -10 day intervals</td>
</tr>
<tr>
<td>Grapes: Wine grapes</td>
<td>50 – 100 ml</td>
<td>First application when young shoots have reached length of 10 cm. Apply at 14 day intervals.</td>
</tr>
<tr>
<td>Table grapes</td>
<td>50 ml</td>
<td>First application after full bloom. Apply at 14 day intervals.</td>
</tr>
<tr>
<td>Deciduous fruit</td>
<td>50 ml</td>
<td>Can be applied from before bud stage through growing season with 14 day intervals.</td>
</tr>
<tr>
<td>Subtropical fruit and citrus</td>
<td>100 ml</td>
<td>Can be applied during any growing stage at 14 day intervals. For citrus, to decrease the overall post-harvest decay pathogen load, apply a full cover spray up to 7 days before harvest.</td>
</tr>
<tr>
<td>Seedling and Nursery stock</td>
<td>25 ml</td>
<td>First application after first true leaf expansion. Apply at 7 day intervals.</td>
</tr>
<tr>
<td>Post-harvest orchard hygiene of Deciduous fruit, Citrus, Subtropical fruit, Table and Wine grapes</td>
<td>100 ml</td>
<td>Apply after harvest to decrease orchard pathogen population as well as shortly before leaf drop to decrease the overwinter pathogen population. Apply at high spray volumes to ensure thorough wetting of foliage and stems.</td>
</tr>
<tr>
<td>Aerial application on crops such as beans and potatoes.</td>
<td>Apply 500 – 750 ml Sporekill® in 25 – 50 L water per hectare.</td>
<td></td>
</tr>
<tr>
<td>Centre pivot application on crops such as beans and potatoes.</td>
<td>Apply 2L Sporekill® in 10 000 – 20 000 L water per hectare.</td>
<td></td>
</tr>
</tbody>
</table>

**PLEASE NOTE:**
The disinfectant registration of Sporekill® is according to relevant South African legislation (Compulsory Specification for disinfectants and detergent-disinfectants). However if any edible crop to be treated is intended for export, consult the relevant importer or exporting body regarding legislation of the destination country with regards to the use of this product, Maximum Residue limits, etc.

**ALWAYS REFER TO THE LABEL AND BROCHURE ACCOMPANYING CONTAINER BEFORE USING THE PRODUCT**

**BENEFITS:**
- Reduces pressure of epiphytic pathogen populations on foliage
- Reduces foliar spread of epiphytic pathogens
- Kills a broad spectrum of micro-organisms
- Kills resistant populations
- Sporekill® has wetting capabilities, increasing contact with the target area
- when applied in a spray-tank mix
- Sporekill® stability and efficacy is not influenced by pH or hardness of water
# KNOW YOUR FERTAGCHEM TECHNICAL TEAM

<table>
<thead>
<tr>
<th>AREA</th>
<th>RESPONSIBLE PERSON</th>
<th>CELL NR</th>
<th>EMAIL ADDRESS</th>
</tr>
</thead>
<tbody>
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