ADJUVANT

MasterLock



An adjuvant for use with post emergence foliar pesticide

applications on permanent crops, orchards and vineyards to reduce spray drift, improve droplet deposition, as well as canopy penetration, droplet spreading and absorption properties.

ACTIVE INGREDIENT

GROUP

ADJUVANT

4: 14/06/2023 - June2023

modified vegetable oil + other ingredients

889 a/l

Reg. No. L 10496 Act No. 36 of 1947

Hazard Statements:

Precautionary Statements:

Causes eye irritation. Harmful if inhaled

Avoid breathing dust, fume, gas, mists, vapours or spray. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so.

Continue rinsing.



WARNING

24 HR EMERGENCY NUMBERS:

Griffon Poison Centre: +27 82 446 8946

24 HR Transport / Spill Emergency no: (Hazcall24) +27 86 044 4411

(Client: Villa Crop Protection)

Registration Holder:

WinField Solutions Registration Holdings (Pty) Ltd.

Co. Reg. No. 2015/312008/07

P.O. Box 10413, Aston Manor, 1630, South Africa

Tel. (011) 396 2233 Website: www.villacrop.co.za



UN Number: Not Regulated



MASTERLOCK*

Reg. No. L 10496 Act 36 of 1947

ACTIVE INGREDIENT:

Registration holder:

WINFIELD SOLUTIONS REGISTRATION HOLDINGS (PTY) LTD.

Co. Reg. No. 2015/312008/07

P.O. Box 10413, ASTON MANOR, 1630 Tel. (011) 396 2233

WARNINGS

Hazard statements:

Causes eye irritation.
Harmful if inhaled.

GROUPS OF PESTICIDES / CHEMICALS WILL BEHAVE IN A SIMILAR WAY WHEN APPLIED WITH MASTERLOCK® AND AS SUCH, THE EFFECT CAN BE EXTRAPOLATED WITHIN A GROUP. PLEASE NOTE THIS PRODUCT WAS NOT TESTED WITH ALL ACTIVE INGREDIENTS WITHIN THE GROUP AND THUS SHOULD NOT BE APPLIED WITH PRODUCTS CONTAINING PHI'S OF 7 OR LESS, UNLESS SPECIFIED AS LISTED.

- Store in a cool, dry, well-ventilated place.
- Store away from food, feeds, seed, fertilizers and other agricultural remedies.
- Keep out of reach of children, uninformed persons and animals.

Aerial application:

Notify all the inhabitants in the immediate vicinity of the area to be sprayed and issue the necessary warnings.

Although this product has been extensively tested under a wide variety of conditions, the registration holder does not warrant that it will be efficacious under all conditions, because the action and effect thereof may be affected by factors such as abnormal soil, climatic and storage conditions, quality of dilution water, compatibility with other substances not indicated on the label as well as by the method, time and accuracy of application. The registration holder furthermore does not accept responsibility for damage to crops, vegetation, the environment or harm to man or animal for any reason whatsoever or for lack of performance of the remedy concerned, due to failure of the user to follow the instruction or to the occurrence of conditions, which could not have been foreseen in terms of the registration. Consult the supplier in the event of any uncertainty.

PRECAUTIONS

Precautionary statements:

Avoid breathing dust, fume, gas, mists, vapours or spray.

Wash hands thoroughly after handling. Do not touch eyes.

Use only outdoors or in a well-ventilated area.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing.

If eye irritation persists: Get medical help.

- Wear gloves when handling the dispenser.
- Avoid contact with skin, eyes and clothing.
- Wash contaminated clothing after use.
- Do not eat, drink or smoke whilst mixing or applying or before washing hands and face and change of clothing.
- Thoroughly clean the applicator after use and dispose of wash water in a way that will not contaminate the environment, food, grazing and water sources.
- TRIPLE RINSE THE EMPTY CONTAINER AS FOLLOWS: Invert the empty container over the spray or
 mixing tank and drain for at least 30 seconds after the flow has slowed down to dripping. Thereafter rinse
 the empty container three (3) times in succession with one quarter of the container volume fresh water and
 decant the rinsate into the spray or mixing tank. Puncture the triple rinsed container and dispose of via an

approved collector or recycler (<u>www.croplife.co.za</u>). Do not bury, burn or donate the container to any other parties that may use it as a container for food or beverages.

Prevent contamination of food, feeds, drinking water and eating utensils.

Relevant hazardous components	
Isobutyl alcohol	< 10 g/ℓ
Benzenesulfonic acid	10 − 50 g/ℓ

SYMPTOMS OF HUMAN POISONING

Harmful if inhaled. Causes eye irritation.

FIRST AID TREATMENT

- <u>Skin:</u> Remove contaminated clothing and wash before re-using. Flush skin with water and then wash with soap and water. Seek medical attention if skin irritation persists.
- <u>Eyes:</u> Flush eyes with clean water for at least 15 minutes. Lift eyelids to facilitate irrigation. If present, remove contact lenses after 5 minutes and continue rinsing. Seek medical attention.
- <u>Inhalation:</u> Remove person from contaminated area to fresh air and assist breathing as needed. Seek medical attention if irritation occurs.
- <u>Ingestion:</u> Seek medical attention or call a poison control centre for treatment advice. Do not induce vomiting unless instructed to do so by a poison control centre or doctor. Do not give anything by mouth to an unconscious person.

NOTE TO PHYSICIAN

There is no specific antidote known. Treat symptomatically and supportively.

Mode of action:

MASTERLOCK[®] is an adjuvant that helps optimize droplet adhesion, which reduces bounce and increases droplet spreading for improved contact and coverage. It also helps to get the droplets down in the canopy. The combination of increased adhesion, reduction in bounce and increased canopy penetration leads to more fungicide and insecticide on the target area.

PRODUCT PROPERTIES

- MASTERLOCK® has been formulated for use with insecticides, plant growth regulators (PGR's) and fungicides. It can be used <u>with products</u> that typically recommend oil adjuvants, surfactants or deposition aids. MASTERLOCK® should be used in orchard crops such as citrus, pome- and stone fruit, tree nuts, avocados, mangoes, litchis and vineyards.
- The registration holder and Villa CP does not support an application on row/field crops.
- THIS PRODUCT CAN IN CERTAIN INSTANCES REPLACE AN OIL OR SURFACTANT. PLEASE CONSULT THE REGISTRATION HOLDER AND/OR A VILLA CP REPRESENTATIVE, BEFORE ANY APPLICATION OR MIXTURE OF THIS PRODUCT IS APPLIED.

<u>DIRECTIONS FOR USE</u>: Use only as directed.

Compatibility:

- MASTERLOCK® is a multi-purpose deposition aid with wetting and absorption properties to improve pest control.
- Adhere to the "Mixing instructions" and "DIRECTIONS FOR USE" of the product with which MASTERLOCK® is to be mixed.
- It is recommended to prepare a test mixture on a small scale to confirm compatibility before applying it commercially.

Mixing instructions:

- Only use clear clean water for mixing. Do not use water, which is contaminated by mud, minerals or organic matter.
- Shake container well before use. Close container after use. When using a buffer, it should be added to the spray mixture first followed by the pesticide.
- Half fill the spray tank with clean water; add the required amount of pesticide while maintaining agitation. Complete the filling operation.

- Use the following procedure when mixing products:
 - a. Mix the required quantity of **WDG or WP** products in a small quantity of water to make a smooth cream and add this to the spray mixture or add the water-soluble bags to the spray mixture.
 - b. In the following order add any additional products: **SC** or **SE** formulations, followed by **EC**, **EW** or **ME** formulations. Lastly add product of **SL**, **SG** or **SP** formulation types. Ensure to pre-mix products individually before adding them to the spray mixture.
- After all the products have been thoroughly incorporated, add the deposition aid MASTERLOCK[®].
- Do not use MASTERLOCK® with surfactants or oil adjuvants. Buffers can still be included in the spray tank mix.
- Maintain continuous suspension in the spray tank by means of proper agitation.
- Prepared spray mixtures must not be left in the spray tank for any length of time, e.g. overnight.
- It is recommended to mix all products to be added to a spray tank on a small scale to determine compatibility thereof.
- Adhere to all LABEL INSTRUCTIONS, WARNINGS, PRECAUTIONS and DIRECTIONS FOR USE of the insecticide, fungicide and plant growth regulators (PGR's) with which MASTERLOCK® is tank mixed.

Application Instructions:

Ground application:

MASTERLOCK® can be used with any correctly calibrated spray equipment as recommended on the insecticide, plant growth regulators (PGR's) and fungicide labels.

Aerial application:

- Adhere to all necessary precautions associated with aerial spraying of insecticide, fungicide and plant growth regulators (PGR's) as indicated in the Aerial Application Instructions in the label of the product to be used with MASTERLOCK®.
- When applied at concentrations of 0.5 % and above, **MASTERLOCK**® decreases the volume percentage fine droplets (<150 micron, subjected to drift) and large droplets (>400 micron), resulting in a more uniform droplet spectrum (reduced Relative Span) with higher volume percentage optimally sized droplets deposited on the intended target area.
- In case of any doubt, consult the Registration Holder or a Villa CP representative.

APPLICATION RATES

FUNGICIDE GROUPS

Fungicide groups	Active ingredients	Trade name examples	
MASTERLO	MASTERLOCK [®] Dosage rate for Fungicides: 20 to 100 mℓ / 100 ℓ water		
REMARKS: Contact a Villa Technical representative for further guidance on rate selection for specific situations. Adhere to the "Mixing Instructions", "DIRECTIONS FOR USE" and "DOSAGE RATES" of the product with which MASTERLOCK® is to be used.			
Amines (SBI: Class II) (FRAC Group 5)	Spiroxamine	Potential 500 EC	
AP-fungicides (Anilino- Pyrimidines) (FRAC Group 9)	Cyprodinil	Choir 500 WDG Elite 625 WDG	
	Pyrimethanil	Support 400 SC (PHI Stone fruit = 3 days) Pyrinon 500 SC	
Benzimidazoles (FRAC Group 1)	Benomyl	Benomyl 500 WP	
(FRAC Gloup 1)	Carbendazim and/or Thiabendazole	Propazim 250 SC Sparta 375 SC Sparta Plus 375 SC Thiazole 500 SC	
Triazoles (FRAC Group 3)	Difenoconazole	Scope 250 EC Venture 275 EC Aria 188 SC	
	Fluzilazole	Intensive 100 EW Sparta 375 SC Sparta Plus 375 SC	
	Penconazole	Excalibur 200 EW Venture 275 EC	
	Propiconazole	Propazim 250 SC Propizole 250 EC	
	Tebuconazole	Tebuzole 250 EW	
	Tetraconazole	Trapeze 100 EC	
CAA-fungicides (Carboxylic Acid Amines) (FRAC Group 40)	Dimethomorph	Dimethozeb 690 WP	
Cyanoacetamide-oxime (FRAC Group 27)	Cymoxanil	Cymoxazeb WP	
Dithiocarbamates (FRAC Group M3)		Cymoxazeb WP	
	Mancozeb (RESIDUES TESTED ON CITRUS PHI 14 DAYS)	Metazeb 700 WP Villa Unizeb 750 WDG Dimethozeb 690 WP Villa Unizeb 800 WP	
	Thiram	THIRAM 750 WP (L 7097)	

Fungicide groups (Continued)	Active ingredients	Trade name examples
MASTERLOCK [®] Dosage rate for Fungicides: 20 to 100 mℓ / 100 ℓ water		

<u>REMARKS</u>: Contact a Villa Technical representative for further guidance on rate selection for specific situations. Adhere to the "Mixing Instructions", "DIRECTIONS FOR USE" and "DOSAGE RATES" of the product with which MASTERLOCK® is to be used.

Dicarboximides (FRAC Group 2)	Procymidone	Typhoon 250 SC (PHI Wine grapes = 7 days)
Inorganic (electrophiles) (FRAC Group M2)	Sulphur	Sulphur 800 WDG Sulflo 700 SC
Inorganic (electrophiles) (FRAC Group M1)	Copper	Copper Oxychloride 850 WP Coppasulfa (PHI Table Grapes = 3 days) Kocide 2000
KRI fungicides (Keto Reductase Inhibitors) (FRAC Group 17)	Fenhexamid	Electron 500 SC (PHI Table grapes = 3 days; Wine grapes = 7 days; Strawberries = 1 day)
Phosphonates (FRAC Group P7) (33)	Fosetyl-Al	Alyfos 800 WDG
(11A0 010up 1 1) (00)	Phosphorous acid and salts	Phosphite 400 SL Lima 400 SL Rootmaster 98
PP-fungicides (Phenyl Pyrroles) (FRAC Group 12)	Fludioxonil	Target 200 WDG (PHI Apples & Pears = 1 day; Citrus = 0 days; Mangoes = 1 day; Stone fruit = 1 day)
Quinones (anthraquinones) (electrophiles) (FRAC Group M9)	Dithianon	Detect 400 SC Nugget 660 WDG
Strobulirine (FRAC Group 11)	Azoxystrobin (RESIDUES TESTED ON CITRUS PHI 77 DAYS)	Essence 500 WDG Fungaway® 250 SC
	Pyraclostrobin	Cerato 250 EC
	Kresoxim-methyl	Kreso WDG
	Trifloxystrobin	Combine 160 WDG Connect 500 WDG Filum 520 SC

INSECTICIDE GROUPS

Insecticide groups	Active ingredients	Trade name examples
MASTER	LOCK [®] Dosage rate for Ins	ecticides: 20 to 100 m/ / 100 /
	ixing Instructions", "DIREC	or further guidance on rate selection for specific CTIONS FOR USE" and "DOSAGE RATES" of the
Avermectins (IRAC Group 6)	Abamectin (RESIDUES TESTED ON VINES PHI 14 DAYS)	Biomectin® 18 EC (PHI Citrus & Pears = 7 days)
	Emamectin benzoate	Porselen Xtra 200 WDG
Buprofezin (IRAC Group 16)	Buprofezin	Beretta WDG
Bromopropylate (IRAC Group 8)	Bromopropylate	Capacity 500 EC
Benzoylureas	Flufenoxuron	Pitch 100 DC
(IRAC Group 15)	Novaluron	React 100 EC
Carbamates	Carbaryl	Karba 850 WP
(IRAC Group 1A)	Methomyl	Methomate 200 SL Methomyl 90 SP (Citrus: lower dosage rate = 2 days; higher rate = 28 days. Peaches = 16 days)
	Oxamyl	Platoon 310 SL (PHI Grapevines – dormant spray)
	Pirimicarb	Apex 500 WDG
Diacylhydrazines (IRAC Group 18)	Methoxyfenozide	Walker 240 SC
METI acaricides and	Fenazaquin	Vanity 200 SC
insecticides (IRAC Group 21A)	Fenpyroximate (RESIDUES TESTED ON CITRUS PHI 28 DAYS)	Lesson 50 EC
Neonicotinoids (IRAC Group 4A)	Acetamiprid	Maintain 200 SP
	Thiacloprid	Consult 480 SC
Organophosphates (IRAC Group 1B)	Acephate (RESIDUES: MACADAMIAS PHI 35 DAYS)	Acephate 750 SP
	Chlorpyrifos	Chlorpyrifos 480 EC Limit 350 EC
	Dichlorvos	Dichlorvos 1000 EC (PHI Grapes = 7 days)
	Mercaptothion	Harrier 500 EC (PHI Citrus = 7 days)
	Methamidophos	Tamron 585 SL
	Methidathion	Methidathion 420 EC
	Parathion	Parathion 500 EC
	Profenofos	Profenfos 500 EC
Organotin miticides (IRAC Group 12B)	Fenbutatin oxide	Crystal 550 SC (PHI Citrus = 7 days; Peaches = 21 days)

Insecticide groups (Continued)	Active ingredients	Trade name examples
MASTER	RLOCK® Dosage rate for Ins	ecticides: 20 to 100 me / 100 e
REMARKS: Contact a Villa Technical representative for further guidance on rate selection for specific situations. Adhere to the "Mixing Instructions", "DIRECTIONS FOR USE" and "DOSAGE RATES" of the product with which MASTERLOCK® is to be used.		
Oxadiazines (IRAC Group 22A)	Indoxacarb	Margin 300 WDG Addition 150 SC
Phenylpyrazoles (Fiproles) (IRAC Group 2B)	Fipronil	Rossi 200 SC
Pyrroles (IRAC Group 13)	Chlorfenapyr	Savage 360 SC
Pyriproxyfen (IRAC Group 7C)	Pyriproxyfen	Scalex 100 EC
Pyridine azomethine derivatives (IRAC Group 9B)	Pymetrozine	Trivia 500 WDG
Pyrethroids (IRAC Group 3A)	Alpha-cypermethrin	Alpha-Thrin 100 SC (PHI Peaches (canning) = 3 days)
	Bifenthrin (RESIDUES TESTED ON MACADAMIA PHI 28 DAYS)	Ramba 100 EC
	Cypermethrin	Polytrin® 200 EC (PHI Peaches (canning) = 3 days)
	Deltamethrin	Delta-thrin 25 EC (PHI Apples & Pears = 7 days)
	Lambda-cyhalothrin	Antset 200 SC Arena 206 EC Judo 50 EC Limit 350 EC
	Tau-Fluvalinate	Klaxon 240 EW
Spinosyns	Spinosad	Spinosin 480 SC
Tartar emetic (IRAC Group 8E)	Tartar Emetic	Tartar Emetic SP
Tetronic and Tetramic acid derivatives	Spirodiclofen	Spirofen 240 SC
(IRAC Group 23)	Spirotetramat (RESIDUES TESTED ON CITRUS PHI 60 DAYS DAYS. VINES; NO PHI if applied before pea berry size; NO RESIDUES)	Tivoli 240 SC

PLANT GROWTH REGULATORS

MASTERLOCK [®] Dosage rate for Plant growth regulators: 100 mℓ / 100 ℓ	
REMARKS: Contact a Villa Technical representative for further guidance on rate selection for specific situations. Adhere to the "Mixing Instructions", "DIRECTIONS FOR USE" and "DOSAGE RATES" for the product with which MASTERLOCK® is to be used.	
1-Naphthaleneacetamide	Amid-Thin
Cyanamide	Alert 520 SL (DORMANT APPLICATION OF GRAPES; NO PHI; NO RESIDUES)
Cytokinin	Exilis [®] Exilis [®] Plus (L 10949)
Ethephon	Ethephon 480 SL
Forchlofenuron (CPPU)	Viveo® 10 SL
Gibberellic acid	Falgro [®] 4 SL Falgro [®] 20 SP Perlan [®] (+ <i>6 BAP</i>) Novagib [®] 10 SL
Paclobutrazol	Avocet [®]
Prohexadion calsium	Kudos [®] 100 WDG
Uniconazole-P	Unique [®]

Consult all relevant pesticide labels for WARNINGS, PRECAUTIONS and DIRECTIONS FOR USE.

The following products mentioned in this label may be replaced with equivalent products:

- SPARTA 375 SC (L 8403 / N-AR 1340) = FLUSILAZIM 375 SC (L 8400 / W 130493) = FLUSILICARB 375 SC (L 9409),
- VILLA UNIZEB 800 WP (L 8056 / N-AR 1091) = COZEB 800 WP (L 7098) = NEWZEB 800 WP (L 8167).

SPARTA 375 SC, VILLA UNIZEB 800 WP and TERBUSIEN SUPER 600 SC are registered products of VILLA CROP PROTECTION (PTY) LTD.

FLUSILAZIM 375 SC and COZEB 800 WP are registered products of UNIVERSAL CROP PROTECTION (PTY) LTD.

FLUSILICARB 375 SC and NEWZEB 800 WP are registered products of CROPASURE (PTY) LTD.

MASTERLOCK® is a registered trademark of WINFIELD SOLUTIONS REGISTRATION HOLDINGS (PTY) LTD.