# Insecticide



# PROMEC 20 EW

Reg. No. L 9729 Act No. 36 of 1947 N-AR 2175

3: 24/07/2023 - July2023

An oil-in-water emulsion translaminar stomach insecticide for the control of pests on the crops as listed.

#### **ACTIVE INGREDIENT**

emamectin (as emamectin benzoate) 20 g/e

GROUP

INSECTICIDE



#### **Hazard Statements:**

Harmful if swallowed

Causes mild skin irritation May cause an allergic skin reaction.

Causes serious eye damage.

Causes damage to organs (nervous system) through prolonged or repeated exposure.

Very toxic to aquatic life with long lasting effects.

#### **Precautionary Statements:**

Wear impervious rubber gloves and boots, protective clothing and chemical safety goggles. Avoid release into the environment



Registration holder: UNIVERSAL CROP PROTECTION (PTY) LTD. Co. Reg. No. 1983/008184/07 P.O. Box 801, Kempton Park, 1620 Tel. (011) 396 2233

Griffon Poison Centre: +27 82 446 8946 24 HR Transport / Spill Emergency no: (Hazcall24) +27 86 044 4411

24 HR EMERGENCY NUMBERS: (Client: Villa Crop Protection)

Website: www.villacrop.co.za

#### PROMEC 20 EW

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IRAC INSECTICIDE GROUP CODE: 6

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# **WARNINGS**

Withholding period:

Minimum time between the last application and harvest:		
Apples & Pears (tank mixture with <b>Methoxyfenozide 240 SC only)</b>	28 days	
Brassica vegetables (including broccoli, brussels sprouts, cabbages and cauliflower)	7 days	
Cereal grains (including Barley and Oats)	14 days	
Cereal grains (including Barley and Oats) (grazing only)	56 days	
Citrus (including Oranges, Lemons, Grapefruit, Mandarins, Limes and Tangerines)	14 days	
Maize	14 days	
Tomatoes	1 day	
Sweetcorn	3 days	

## **NOTE**

THE MAXIMUM RESIDUE LEVELS (MRL'S) WILL NOT BE EXCEEDED PROVIDED APPLICATIONS ARE MADE AS HEREWITH PRESCRIBED. WHEN THE CROP IS DESTINED FOR THE EXPORT MARKET, THE INSTITUTION OF CONCERN MUST BE CONTACTED PRIOR TO THE USE OF PROMEC 20 EW IN A SPRAY PROGRAMME.

#### **Hazard statements:**

Harmful if swallowed.
Causes mild skin irritation.
May cause an allergic skin reaction.
Causes serious eye damage.
May cause damage to the organs.
Causes damage to organs (nervous system) through prolonged and repeated exposure.
Very toxic to aquatic life.
Very toxic to aquatic life with long lasting effects.

- Handle with care.
- Harmful to birds and toxic to bees exposed to direct spray contact.
- Store in a cool, dry, well-ventilated place in the original container, tightly closed and secured.
- Store under lock and key, away from food, feeds, seed, fertilizers and other agricultural remedies.
- Keep out of reach of children, uninformed persons and animals.
- Re-entry: Do not enter treated area within one (1) day after treatment unless wearing protective clothing.
- Unprotected workers must vacate the area under treatment.
- Do not use this product in any way contrary to the directions on this label.
- PROMEC 20 EW has been tested on the most important commercial cultivars without any phytotoxic
  effects. More susceptible cultivars may be released in future which will need to be tested; for this apply
  PROMEC 20 EW to a limited test area before commercial applications are made.

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Although this remedy has been extensively tested under a large variety of conditions, the registration holder does not warrant that it will be efficacious under all conditions. 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 and the occurrence of resistance of the pests to the remedy concerned, as well as by the method, time and accuracy of application. The registration holder further does not accept responsibility for damage to crops, vegetation, the environment or harm to man or animal or for lack of performance of the remedy concerned, due to failure of the user to follow the label instructions or to the occurrence of conditions, which could not have been foreseen in terms of the registration. Consult the supplier in event of any uncertainty.

#### **PRECAUTIONS**

## Precautionary statements:

Do not breathe dust, fume, gas, mist, vapours and spray.

Avoid breathing dust, fumes, vapours or spray.

Wash hands thoroughly after handling. Do not touch eyes.

Do not eat, drink or smoke when using this product.

Contaminated work clothing should not be allowed out of the workplace.

Avoid release into the environment.

Wear impervious rubber gloves and boots, protective clothing and chemical safety goggles.

IF SWALLOWED: Get medical help.

IF ON SKIN: Wash with plenty of water and non-abrasive soap.

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

Get medical help if you feel unwell.

Rinse mouth.

If skin irritation or rash occurs: Get medical help.

Take off contaminated clothing and wash it before reuse.

Collect spillage.

Store locked up.

Dispose of content/container to suitable landfill in accordance with local regulations.

- All persons in direct contact with the product, including markers must wear protective clothing, protective gloves, boots and face shield. Immediately remove all contaminated clothing and shoes and wash before re-use
- Do not spray during periods of Bee activity.
- Avoid drift of spray onto other crops, grazing, rivers, dams and areas not under treatment. Clean applicator
  after use. Do not dispose of wash water where it can contaminate other crops, grazing, rivers or dams and
  boreholes.
- Thoroughly clean spraying equipment directly after use and dispose of wash water where it will not contaminate food, grazing, boreholes, rivers or dams. Clean the applicator with a household ammonia solution (1 %) or **Protank**® **liquid cleaner** before using other pesticides. Let the solution stand for several hours, preferably over-night. Rinse at least twice. This applicator should not be used for applying chemicals other than insecticides.
- Prevent contamination of food, feeds, drinking water and eating utensils.
- 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 (www.croplife.co.za). Do not bury, burn or donate the container to any other parties that may use it as a container for food or beverages.
- If recycling, replace cap and return clean containers to a recycler or designated collection point. If not recycling, break crush or puncture and bury the empty containers in a local authority landfill. If no landfill is available, bury below 500 mm into a specially marked disposal pit clear of waterways, desirable vegetation and tree roots. Do not burn.
- **Do not** re-use the empty container for any other purpose.

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• Do not apply this product in combination or tank mixture with any other product or agricultural remedy which is not specifically listed on this label. Universal Crop Protection (Pty) Ltd accepts no responsibility for any negative effects experienced if the instructions on this label are not adhered to, unless a Universal Crop Protection representative was consulted beforehand.

Relevant hazardous components		
Emamectin benzoate	2.54 %	
Shellsol AB 150	<5 %	
Benzyl alcohol	<20 %	
Tersperse 4894	<5 %	
Parmetol A26 (Mixture)	<1 %	

#### SYMPTOMS OF HUMAN POISONING

Prolonged or repeated exposure may cause damage to nervous system, inhalation, skin and may cause headaches, nausea, vomiting, weakness and diarrhoea.

# **FIRST AID TREATMENT**

- <u>Inhalation:</u> Remove person from contaminated area to fresh air and assist breathing as needed. Seek medical attention if irritation occurs.
- <u>Skin contact:</u> Remove contaminated clothing and wash before re-using. Wash skin gently and thoroughly with water and non-abrasive soap. **Seek medical attention if skin irritation or rash occurs.**
- <u>Eye contact:</u> Flush eyes with clean water for at least 15 minutes. Lift eyelids to facilitate irrigation. If present, remove contact lenses after five (5) minutes and continue rinsing. Seek medical attention if irritation persists.
- <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. If alert, rinse mouth with plenty of water.

#### **NOTE TO PHYSICIAN**

No specific antidote known. The material in this product is believed to enhance GABA activity in animals. Thus, it is probably wise to avoid drugs that enhance GABA activity (barbiturates, benzodiaziphines, valproic acid) in patients with potentially toxic exposure.

#### **RESISTANCE WARNING**

**PROMEC 20 EW** is a group code 6 insecticide. Any insect population may contain individuals naturally resistant to **PROMEC 20 EW** and other group code 6 insecticides. The resistant individuals can eventually dominate the insect population if these insecticides are used repeatedly. These resistant insects may not be controlled by **PROMEC 20 EW** of any other group code 6 insecticide.

To delay insecticide resistance:

- avoid exclusive repeated use of insecticides from the same insecticide group code. Alternate or tank mix with products from different insecticide group codes,
- integrate other control methods (chemical, cultural, biological) into insect control programmes.

For specific information on resistance management contact the registration holder of this product or consult the website of the Insecticide Resistance Action Committee (https://irac-online.org/).

For specific information on resistance management, contact the registration holder of this product. Since the occurrence of resistance cannot be forecast, users are advised to keep treated plants under close observation. If treatment is not effective following the use of **PROMEC 20 EW** as recommended, a resistant strain may be present. If a resistant strain is positively identified, consideration should be given to prompt use of an insecticide with a different mode of action for which there is no record of resistance.

**PROMEC 20 EW** effectively controls Lepidoptera larvae that are resistant to organophosphates, pyrethroids and insect growth regulators. Larvae ceases to feed after ingestion of treated plants with death occurring within four days.

**Abamectin** and **Emamectin benzoate** are IRAC mode of action group 6 insecticides. These active ingredients are registered for the control of pests on various crops, including tree nuts, citrus fruit, pome fruit, stone fruit, grapevine and various vegetables. Although these active ingredients have the same mode of action, they target different pests whose life cycles often overlap. To delay the onset of resistance, these

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insecticides may not be applied within 30 days of each other. If an application of **Abamectin** is made, an application of **Emamectin benzoate** can only be made 30 days thereafter, and vice versa. This waiting period should be increased in the case of target insects with a longer lifecycle to ensure insects from consecutive generations are not exposed to the same mode of action group insecticide. Apply registered insecticides with a different mode of action within the 30-day period following an application or block applications of **Abamectin** or **Emamectin benzoate**. Always conform to all label recommendations and only use registered dosages.

#### MODE OF ACTION

**PROMEC 20 EW** is effective for the control of Lepidoptera larvae. **PROMEC 20 EW** is translaminar and is rapidly absorbed into the plant. **PROMEC 20 EW** is effective against Lepidoptera larvae resistant to organophosphates, pyrethroids and insect growth regulators. After **PROMEC 20 EW** ingestion, larval feeding ceases and death occurs within four (4) days.

#### **USE RESTRICTIONS**

• Do not use PROMEC 20 EW during flowering when Bees are actively foraging. This product is toxic to Bees.

# **DIRECTIONS FOR USE:** Use only as directed.

## Compatibility:

- PROMEC 20 EW is compatible with Methoxyfenozide 240 SC, such as Clarity 240 SC, Walker 240 SC
   / Assessor 240 SC and adjuvants such as SOLITAIRE (L 6962), Direct / Link.
- **Solitaire, Direct / Link** is a non-ionic adjuvant for use with post-emergence applications in combination with most agrochemical remedies such as insecticides, fungicides, herbicides and foliar nutrients to enhance spreading and penetration.
- It is advisable to ensure effective mixing of the pesticide with **SOLITAIRE**, **DIRECT** or **LINK** in a jar test, before such a tank mix is applied.
- When **PROMEC 20 EW** is used in conjunction with any other agricultural remedy, adhere to all **WARNINGS**, **PRECAUTIONS** and **DIRECTIONS FOR USE** mentioned on that label.
- The compatibility of PROMEC 20 EW with other agrochemicals not listed on this label has not been fully investigated. If tank mixtures with other products are made, first confirm physical compatibility by mixing small volumes of the products in the correct ratio with the appropriate quantity of water. If the products are physically compatible, this does NOT imply that they will be biologically compatible (effective against the target pest), thus the registration holder will not take responsibility for ineffective control in these scenarios. Water quality and formulation properties of other products may influence compatibility.

#### Mixing instructions:

- Half fill the spray tank with clean water. Add the required amount of PROMEC 20 EW while maintaining agitation. Complete the filling operation whilst maintaining agitation.
- When mixing **PROMEC 20 EW** with other products (as registered on this label), use the following procedure:
  - o If a buffer is required, it should be added to the spray mixture first.
  - 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. If dry formulations are contained in water-soluble bags, add this to the spray mixture.
  - In the following order, add any additional products: SC or SE formulations, followed by EC, EW or ME formulations. Lastly add products of SL, SG or SP formulation types. Pre-mix products individually before adding them to the spray mixture.
  - After all the products have been thoroughly incorporated, add the surfactant/oil adjuvants such as Solitaire, Direct or Link.
- Maintain continuous agitation in the spray tank during mixing and application by means of proper agitation.
- Prepared spray mixture must not be left in the spray tank for any length of time, e.g. overnight.

# **APPLICATION INSTRUCTIONS**

#### Ground application:

**PROMEC 20 EW** can be applied with any suitable medium to high-volume application equipment that is correctly calibrated. Ensure that the spray mixture is properly agitated and that it is distributed evenly over the target area. Apply in 200 to 1000 litres of water per hectare, depending on the type of crop and plant size. The use of flat fan nozzles is recommended,

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## **Crop information:**

Apples & Pears - Codling Moth control

- For optimal control, **PROMEC 20 EW** and **Methoxyfenozide 240 SC** should be used in combination with pheromones for mating disruption.
- Codling moth resistance levels against organophosphates may vary in orchard to orchard, therefore control techniques should be adjusted accordingly.
- Always use practices such as pruning, thinning and the collection and destroying of dropped and infested
  fruit.
- Use the correct spray volumes of PROMEC 20 EW and Methoxyfenozide 240 SC for optimal control.
- Use compounds from different IRAC chemical groups against each moth generation.
- Four applications of **PROMEC 20 EW** and **Methoxyfenozide 240 SC** should be applied consecutively at 14-day intervals. For optimal results, this programme should not be interrupted using other compounds. Ensure that the correct rates are applied according to the Tree Row Volume (TRV) formula.
- If **PROMEC 20 EW** and **Methoxyfenozide 240 SC** is used for the control of the last generation of Codling moth in the season, a product with a different mode of action should be used for control of the first generation of the following season.

# High volume application

Tree Row Volume

The volume of water to be applied per hectare must be calculated according to the Tree Row Volume (TRV) formula:

# Litre /ha = Tree height x Tree diameter x 937 Row Width

**TRV** is the volume of water required when the trees are in full leaf. Use the water volume required per hectare to calculate the amount of **PROMEC 20 EW** and **Methoxyfenozide 240 SC** required during the various growth stages of a tree during the season.

Water requirements per hectare as recommended according to the different growth stages of a tree:

Growth Stage	% High volume water requirement / ha
From green tip to ± 30 % blossom	60 %
From ± full blossom to ± middle November	80 %
From ± beginning December	100 %

## Low volume

When **PROMEC 20 EW / Methoxyfenozide 240 SC** are applied as a low volume spray, ensure that the correct amount of product as calculated for the high volume requirement is applied per hectare.

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# **APPLICATION RATES**

Crop / Pest	Dosage Rate	Remarks
Apples and Pears Codling moth (Cydia pomonella)	50 mε / 100 ε water PROMEC 20 EW PLUS 60 mε /100 ε water Methoxyfenozide 240 SC	Commence application at the onset of the 1st, 2nd or 3rd generation. Ensure an effective control programme is followed prior to and after the applications of the PROMEC 20 EW and Methoxyfenozide 240 SC.  Apply as a full cover spray to ensure thorough wetting and coverage. For the second moth generation, start with applications at the onset of this generation.  Repeat applications at 14-day intervals, applying a maximum of four (4) applications per generation.  To control further generations of the pest, use an insecticide with a different mode of action.  Do not exceed a maximum of four (4) applications per season.  Refer to "Crop Information" under "DIRECTIONS FOR USE".
Cabbages and Cauliflower only)  Diamondback moth (Plutella xylostella)  PLUS  a suitable adjuvant.  OR  means of scoutin Add a suitable at the appropriat Do not exceed any Brassica company of the properties of		Apply as soon as the pest is noticed as indicated by
	Add a suitable adjuvant such as Solitaire / Link / Direct	
	a suitable adjuvant.	at the appropriate label rate.  Do not exceed a maximum of four (4) applications to
	OR	any Brassica crop.
		Where more than one (1) crop is grown per year, do not apply more than four (4) <b>PROMEC 20 EW</b> sprays per year.
	PLUS	Refer to the IRAC resistance guidelines.
	a suitable adjuvant	

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Crop / Pest	Dosage Rate	Remarks
Cereal Grains (including Barley and Oats)  African ballwarm	500 mℓ / ha <b>PLUS</b>	litres of water per hectare. If necessary, repea
African bollworm ( <i>Helicoverpa armigera</i> )	100 mℓ / 100 ℓ water <b>Direct</b>	Do not apply more than two (2) applications of PROMEC 20 EW per growing season. If infestation persists, alternate with products with a different mode of action.
Citrus (including oranges, lemons, grapefruit, mandarins, limes and tangerines)  False codling moth (Thaumatotibia leucotreta)	80 to 100 mℓ / 100 ℓ water	Apply as a full cover spray, ensuring thorough coverage of the fruit.  When using PROMEC 20 EW for the control of early or mid-season False codling moth infestation, two (2) consecutive applications can be made at a 14-day interval (one (1) application window), targeting one generation of the pest. To delay insecticide resistance, application windows prior to, and following the PROMEC 20 EW application window, should use an insecticide with a different mode of action.  For late season infestation (the last application window), two (2) consecutive applications of PROMEC 20 EW can be applied, one (1) application at four (4) weeks before harvest and one (1) application at two (2) weeks before harvest.  If PROMEC 20 EW was not used for the last application window against False codling moth, a single application of PROMEC 20 EW can be applied at one (1) week before harvest.  Do not apply more than four (4) applications of PROMEC 20 EW per growing season (including for African bollworm).  Do not apply PROMEC 20 EW during flowering or when Bees are actively foraging.
Maize (including Sweetcorn)  Fall armyworm (Spodoptera frugiperda)	600 mℓ / ha	Apply as an early full cover spray in a minimum of 450 litres water per hectare, before larvae migrate into maize ears.  The use of <b>PROMEC 20 EW</b> is not recommended for the control of larvae exceeding one (1) cm in size.  Control measures should commence as soon as pest is noticed in the production region. Apply in an integrated pest management programme.  Alternate with products with a different mode of action. Apply with spray intervals of seven (7) days. <b>Do not apply more than two (2) applications</b> of <b>PROMEC 20 EW per growing season.</b>

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Crop / Pest	Dosage Rate	Remarks
Sweetcorn American bollworm (Helicoverpa armigera)	375 mℓ to 625 mℓ / ha	For the best results, apply soon after the eggs have hatched, but before the larvae enter the cobs.  Do not exceed a maximum of four (4) applications of PROMEC 20 EW per year.  Thorough spray coverage of PROMEC 20 EW is essential. Larvae present within the cob at the time of
		application may not be controlled. Use the low rate when targeting light infestations of small larvae.  Refer to the IRAC resistance guidelines.
Tomatoes American bollworm (Helicoverpa armigera)		Apply as soon as pest is noticed in a block of two (2) applications, seven (7) days apart. Do not apply the second <b>PROMEC 20 EW</b> block application within three (3) weeks of the first block application.
Tomato semi-looper (Chrysodexis acuta)	50 mℓ /100 ℓ water PROMEC 20 EW	If re-infestation occurs within three (3) weeks of the second <b>PROMEC 20 EW</b> application, non-related chemistry should be used e.g., group 5 - <b>Spinosad</b> , group 13 - <b>Chlorfenapyr</b> or group 22 - <b>Indoxacarb</b> .
	OR	Do not exceed four (4) applications per crop cycle.  Do not use less than 500 me PROMEC 20 EW per
	500 m/ ha PROMEC 20 EW	hectare. Use a penetrant /wetter or light mineral oil with PROMEC 20 EW. Do not add a sticker.
		<b>PROMEC 20 EW</b> should be used according to the Croplife insecticide resistance strategy.

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

- CLARITY 240 SC (L 9128) = ASSESSOR 240 SC (L 10349) = WALKER 240 SC (L 10348) = ADVISOR 240 SC (L 10550) (Methoxyfenozide) and
- **SOLITAIRE** (L 6962) = **DIRECT** (L 8680) = **LINK** (L 8675).

CLARITY 240 SC is a registered product of MERIDIAN AGROCHEMICAL COMPANY (PTY) LTD.

ASSESSOR 240 SC and LINK are registered products of UNIVERSAL CROP PROTECTION (PTY) LTD.

WALKER 240 SC and DIRECT are registered products of VILLA CROP PROTECTION (PTY) LTD.

ADVISOR 240 SC is a registered product of CROPASURE (PTY) LTD.

**SOLITAIRE** is a registered product of **SAFAGRIC (PTY) LTD.** 

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