DIRECTIONS FOR USE ENCLOSED Expiry Date:

Insecticide



LUTON 240 SC

Reg. No. L 9386 Act No. 36 of 1947

7: 01/10/2024 - Jan2025

A suspension concentrate, systemic insecticide for the control of insects on crops as listed.

ACTIVE INGREDIENT

spirotetramat (tetramic acid) 240 a/e **GROUP**

INSECTICIDE



WARNING



Hazard Statements:

May cause an allergic skin reaction

Causes serious eye irritation. May cause respiratory irritation. Suspected of damaging fertility or the unborn child.

Toxic to aquatic life with long lasting effects.

Precautionary Statements:

Avoid breathing mist, vapours and spray.

Wash hands thoroughly after handling. Do not touch eyes. 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 65 Botes Road, Glen Marais, Kempton Park, 1619 Tel. (011) 396 2233 Website: www.villacrop.co.za

IN CASE OF POISONING / 24 HR EMERGENCY NUMBERS:

Griffon Poison Information Centre (National): +27 82 446 8946 Poison Information Helpline (National): +27 861 555 777 24 Hr Transport / Spill emergency no: (Hazcall24) +27 86 044 4411 (Client: Villa Crop Protection)

LUTON 240 SC

Reg. No. L 9386 Act No. 36 of 1947 IRAC INSECTICIDE GROUP CODE: 23

ACTIVE INGREDIENT:

spirotetramat (tetramic acid)......240 g/ℓ

Registration holder:

UNIVERSAL CROP PROTECTION (PTY) LTD. Co. Reg. No. 1983/008184/07

65 Botes Road, KEMPTON PARK, 1619 Tel. (011) 396 2233

WARNINGS

Withholding periods:

Minimum time between the last application and harvest:		
Brassica vegetables (including Broccoli, Brussels sprouts, Cabbage	3 days	
& Cauliflower) & Leafy vegetables (including Brassica leafy	(Do not graze treated Brassica	
vegetables, Mustard, Spinach, Fennel & Chinese cabbage)	crops)	
Capsicums (including Peppers, Paprika, Pepino, Okra, Chillies &	1 day	
Eggplant)	i day	
Cereal grains (including Barley, Wheat and Oats)	14 days	
Cucurbits (including Butternuts, Melons, Squash, Cucumbers,	1 day	
Pumpkins, Patty Pans and Marrows) & Lettuce	1 day	
Maize	7 days	
Maize (grazing)	14 days	
Pome fruit (including Apples and Pears)	0 days	
Potatoes & Carrots	7 days	
Stone fruit (including Apricots, Nectarines, Peaches, Plums, Prunes & Cherries)	14 days	

IN THE CASE OF CROPS INTENDED FOR EXPORT, CONFIRM WITHHOLDING PERIODS WITH THE RELEVANT EXPORT ORGANISATION. IF THIS PRODUCT IS USED ACCORDING TO THE RECOMMENDATIONS ON THIS LABEL, LOCAL MRL VALUES WILL NOT BE EXCEEDED. HOWEVER, UNIVERSAL CROP PROTECTION (PTY) LTD. CANNOT ACCEPT RESPONSIBILITY FOR EXPORTED CROPS EXCEEDING THE IMPORT TOLERANCES OF OTHER COUNTRIES.

Hazard statements:

May cause an allergic skin reaction.
Causes serious eye irritation.
May cause respiratory irritation.
Suspected of damaging fertility or the unborn child.
Toxic to aquatic life with long lasting effects.

- Handle with care.
- Store in a cool, dry place away from food, feeds, fertilizers and other agricultural remedies.
- Keep out of reach of children, animals and uninformed persons.
- Re-entry: Do not enter treated area until spray deposit has dried unless wearing protective clothing.

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 effected by factors such as abnormal soil, climatic and storage conditions, quality of dilution water, compatibility with other substances not indicated on the label, the occurrence of resistance of the pest against the remedy concerned, 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 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 the event of any uncertainty.

LUTON 240 SC PAGE 2 OF 9

PRECAUTIONS

Precautionary statements:

Obtain, read and follow all safety instructions before use.

Avoid breathing mist, vapours and spray.

Wash hands thoroughly after handling. Do not touch eyes.

Use only outdoors in a well-ventilated area.

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

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. Continue rinsing.

IF exposed or concerned, get medical advice.

Get medical help if you feel unwell.

If skin irritation or rash occurs or if eye irritation persists: Get medical help.

Collect spillage.

Store in a well-ventilated place. Keep container tightly closed.

Store locked up.

Dispose of contents/container in accordance with local regulations.

- Wash contaminated clothing after use.
- Do not eat, drink or smoke whilst mixing or applying the product or before washing hands and face and change of clothing.
- Prevent drift onto other crops, grazing, rivers, dams or areas not under treatment.
- Thoroughly clean spraying equipment directly after use and dispose of wash water where it will not contaminate food, grazing, boreholes, rivers or dams.
- 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 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.
- Destroy the container by perforation and flattening and dispose of it in a safe way.
- **Do not** re-use the empty container for any other purpose.
- Prevent contamination of food, feeds, drinking water and eating utensils.

Relevant hazardous components	
Spirotetramat	240 g/ℓ

NOTE: The ingredients listed above contribute to the overall GHS classification, the remaining ingredients do not have to be listed according to the South African Regulations for Hazardous Chemical Agents 2021, Regulation 14(b).

In case of poisoning, call the following number: +27 82 446 8946 (Griffon Poison Information Centre) or +27 861 555 777 (Poison Information Helpline).

In case of a chemical spill call the following 24 Hr Transport / Spill emergency number: +27 86 044 4411 (Hazcall24 / Client: Villa Crop Protection).

FIRST AID TREATMENT

- Remove the victim from the area of exposure. Wash off remaining material with plenty of water. In the event of any complaints or symptoms, avoid further exposure. Immediately consult a doctor.
- **Inhalation**: Remove person from contaminated area to fresh air and assist breathing as needed. If breathing has stopped, perform artificial respiration and administer oxygen. Avoid mouth-to-mouth resuscitation. Treat symptomatically and supportively. Seek medical attention if irritation persists.
- **Skin**: Remove contaminated clothing and shoes. Gently wipe of excess chemical. Wash skin gently and thoroughly with water and non-abrasive soap. If irritation persists or sensitization is suspected, obtain medical attention.

LUTON 240 SC PAGE 3 OF 9

- Eyes: Immediately flush eyes with clean water for at least 15-20 minutes. Lift eyelid (s) to facilitate irrigation. If present, remove contact lenses after 5 minutes and continue rinsing. Seek medical attention if irritation persists.
- **Ingestion**: **Seek medical attention immediately.** Do NOT induce vomiting unless instructed to do so by a poison control centre or doctor. If the person is alert, rinse mouth thoroughly with water. Do not give anything by mouth to an unconscious person.

RESISTANCE WARNING

LUTON 240 SC is a group code 23 insecticide. Any insect population may contain individuals naturally resistant to **LUTON 240 SC** and other group code 23 insecticides. The resistant individuals can eventually dominate the insect population if these insecticides are used repeatedly. These resistant insects may not be controlled by **LUTON 240 SC** or any other group code 23 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.

Mode of Action:

LUTON 240 SC contains **Spirotetramat**, which is a lipid biosynthesis inhibitor that acts by inhibiting the enzyme acetyl CoA carboxylase. It affects lipid biosynthesis mainly after ingestion but also on contact, affecting eggs and larvae, with additional effects on adult fecundity. The compound has translaminar activity and, after penetrating the leaves, it is de-esterified and transported within both the xylem and phloem of the plant (systemic insecticide). It is mostly used for the control of sucking insects, and due to its mobility in the plant, it is especially useful in controlling hidden pests and protects new shoots appearing after foliar application.

GENERAL INFORMATION Effect on beneficial insects

Harmless		
Bees		

USE RESTRICTIONS

- LUTON 240 SC is only active against juvenile / nymph stages of the target pests and causes sterilisation of adult females. Thus, adults may still be observed following some-time after application. Adult populations will decrease from approximately two weeks after application depending on the effect of environmental conditions on the lifecycle of target pests.
- It is not recommended to apply **LUTON 240 SC** in tank mixtures with fungicides, as this may result in sub-optimal control of the targeted insect pest(s). If unavoidable then use the higher dosage rate (as per below recommendations) in combination with the fungicide.

DIRECTIONS FOR USE: Use only as directed.

NOTICE TO USER:

Read the entire label before application. This agricultural remedy is to be used only in accordance with the instructions on the label. It is an offence under the Act to use this agricultural remedy for any purpose in a manner contrary with the directions on the label.

Compatibility:

- LUTON 240 SC is compatible with light to medium narrow range mineral oil, Villa 51, Charge, Direct and MASTERLOCK® (L 10496). Refer to the respective product labels for USE RESTRICTIONS and DIRECTIONS FOR USE.
- 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 ideally be used <u>ONLY</u> in orchard crops such as citrus, pome and stone fruit, tree nuts, avocados, mangoes, litchis and vineyards. Masterlock® can be added to the applications at a rate of 20 to 100 mℓ per 100 litres water to improve coverage and droplet deposition.

LUTON 240 SC PAGE 4 OF 9

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 DAYS OR LESS, UNLESS SPECIFIED.

- Capsicums & Cucurbits: This product has not been tested on all local cultivars / varieties or in any tank mixtures with other pesticides. If LUTON 240 SC is used on any new cultivar, ensure no phytotoxicity will be present by spraying a small test area of the crop.
- Do not apply LUTON 240 SC in any tank mixtures not registered.

Mixing instructions:

- Half fill the spray tank with clean water. Add the required amount of **LUTON 240 SC** while maintaining agitation. Complete the filling operation whilst maintaining agitation.
- When mixing LUTON 240 SC with other products (as registered on this label), use the following procedure:
 - 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 wetter / spreader adjuvants such as Charge, Villa 51, Direct or Masterlock®.
- Maintain continuous suspension in the spray tank during mixing and application by means of proper agitation.
- The prepared spray mixture must not be left in the spray tank for any length of time, e.g., overnight.

Application instructions:

Always use suitable, correctly calibrated equipment, in good working order, to ensure thorough wetting of all parts of the plant.

Deciduous Fruit Trees:

• Apply **LUTON 240 SC** as a high volume (HV) application to deciduous fruit trees. Calculate the rate per hectare according to the formula for High Volume Requirements HVR, using "Unrath's Formula" for "Tree Row Volume" (TRV).

TRV = <u>Tree Height (TH)* x Tree Width (TW)* x 937</u> = HVR in litres per hectare Distance between Rows (RW)

Directions for application volumes at different growth stages and the calculation of rate per hectare, based on High Volume Requirements (HVR):

Growth Stage	Application Volume
Bud break to Full Blossom	60 % of HVR
75 % Petal fall to (1) one month later (Mid-season)	80 % of HVR
Mid-season to Post harvest, before Leaf drop	100 % of HVR

Rate per ha = HVR in ℓ/ha x Rate per 100 litres

100

Post Spray Equipment Cleaning

It is essential to rinse the spray tank and all hoses with a 0.1 % solution of either calcium chloride or ammonium hydroxide or the recommended rate of **Protank® liquid cleaner** according to the product label. Allow this solution to stand in the spray equipment for 15 minutes; empty the spray equipment; repeat the rinsing with a 0.1 % solution of calcium chloride or ammonium hydroxide for 15 minutes; rinse all equipment with water. Nozzles and fitters must be cleaned individually. Rinse water and solution should be drained in a cesspool or drain where it will not contaminate any water source.

LUTON 240 SC PAGE 5 OF 9

^{*} Tree height and tree width should be measured during summer when trees are in full flush)

APPLICATION RATES

IMPORTANT: Refer to "USE RESTRICTIONS" and "DIRECTIONS FOR USE" above.

Crop / Pest	Dosage Rate	Remarks
Brassica vegetables (including Broccoli, Brussels sprouts, Cabbage & Cauliflower) Green peach aphid (Myzus persicae) Whitefly (Bemisia tabaci Biotype B)	200 mℓ / ha (20 mℓ / 100 ℓ water) PLUS 20 mℓ / 100 ℓ water Charge 300 to 400 mℓ / ha (30 to 40 mℓ / 100 ℓ	Commence application when infestation has reached local threshold levels. Apply a full cover spray of 1000 litres spray mixture per hectare. Higher recommended rates should be used in cases of severe pest pressure, when crops are undergoing rapid growth or are very dense, or if longer residual control is required. Should infestation persist, an additional application can be made after seven (7) days.
	water) PLUS 20 mℓ / 100 ℓ water Charge	Do not apply more than three (3) consecutive applications of LUTON 240 SC per season. If further control is required, make use of insecticides
Leafy vegetables (including Brassica leafy vegetables, Mustard, Spinach, Fennel, Lettuce & Chinese cabbage)	200 mℓ / ha (20 mℓ / 100 ℓ water) PLUS	with a different mode of action.
Green peach aphid (<i>Myzus</i> persicae)	20 mℓ / 100 ℓ water Charge	
Capsicums (including Peppers, Paprika, Pepino, Okra, Chillies & Eggplant)	20 mℓ / 100 ℓ water (2 mℓ / 10 ℓ water)	Commence application when infestation has reached local threshold levels. Apply a full cover spray of 500 litres spray mixture per hectare. Higher recommended rates should be used in
Green peach aphid (<i>Myzus</i> persicae)	PLUS 20 mℓ	cases of severe pest pressure, when crops are undergoing rapid growth or are very dense, or if longer residual control is required.
Potato aphid (Macrosiphum euphorbiae)	(2 m <i>l</i> / 10 <i>l</i> water) Charge	Should infestation persist, an additional application can be made after 10 days. Do not apply more than two (2) consecutive applications of LUTON 240 SC per season. If
Whitefly (Bemesia tabaci Biotype B) Western flower thrips	30 to 40 mℓ / 100 ℓ water (3 to 4 mℓ / 10 ℓ water)	further control is required, make use of insecticides with a different mode of action.
(Frankliniella occidentalis) PLUS flower thrips, however the is limited. Thus, total Thri	LUTON 240 SC controls the juvenile stage of Western flower thrips, however the effectiveness against adults is limited. Thus, total Thrip counts will decline over time and not necessarily direct after application.	

LUTON 240 SC PAGE 6 OF 9

Crop / Pest	Dosage Rate	Remarks
Cereal grains (including Barley, Wheat and Oats) Russian wheat aphid (Diuraphis noxia)	200 to 400 mℓ / ha PLUS 100 mℓ / 100 ℓ water Direct	Apply the first application at the onset of infestation before damage symptoms are visible. Apply the second application 14 days later. Apply in 200 to 300 litres water per hectare, depending on the crop growth stage and density of the crop. Ensure thorough coverage of all parts of the plant.
Cucurbits (Including Melons, Squash, Cucumbers, Pumpkins, Patty Pans & Marrows) Cotton aphid (Aphis gossypii)	200 to 300 mℓ / ha PLUS 20 mℓ Charge OR	Do not exceed two (2) applications per season. Screen the crop(s) and begin with treatments once the local thresholds levels are reached. Apply the higher dosage rate under severe pest pressure or where extended residual control is required, during periods of rapid crop growth or in the case of dense or large crops.
Green peach aphid (<i>Myzus</i> persicae)	20 to 30 mℓ / 100 ℓ water (2 to 3 mℓ / 10 ℓ water) PLUS 20 mℓ (2 mℓ) Charge	Complete and even coverage of the target crop is essential. The spray volume depends on the crop size. Continue to screen the crop(s) and apply follow-up treatments as required.
Whitefly (<i>Bemisia tabaci</i> Biotype B)	300 to 400 mℓ / ha PLUS 20 mℓ Charge OR	Do not apply a LUTON 240 SC follow-up application within one (1) week after a LUTON 240 SC treatment. Do not apply more than three (3) applications of LUTON 240 SC per crop.
	30 to 40 mℓ / 100 ℓ water (3 to 4 mℓ / 10 ℓ water) PLUS 20 mℓ (2 mℓ) Charge	

LUTON 240 SC PAGE 7 OF 9

Crop / Pest	Dosage Rate	Remarks
Maize Maize aphid (Rhopalosiphum maidis	300 mℓ / ha	
	OR	
	3 mℓ / 100 m row	Annha a single annlinetian suban infectation has
	PLUS 50 mℓ / 100 ℓ water Villa 51 OR	Apply a single application when infestation has reached local threshold levels. Do not apply prior to tassel emergence. Ensure thorough coverage of the entire plant, especially the underside of the leaves.
	3 mℓ / 10 ℓ water PLUS	
	5 mℓ / 10 ℓ water Villa 51	
Pome fruit (including Apples and Pears)	40 to 50 mℓ / 100 ℓ water	Apply as a full cover spray, when crawler movement begins or when first symptoms of woolly apple aphid presence is noticed. Repeat application 14 days later.
Woolly apple aphid	PLUS	Ensure thorough coverage of all plant parts.
(Eriosoma lanigerum)	100 mℓ / 100 ℓ water Masterlock ®	Calculate the spray volume according to "Unrath's formula" as indicated under Deciduous Fruit Trees above.
		Do not exceed two (2) applications per season.
Potatoes & Carrots Aphids Including green peach aphid (Myzus persicae)	30 mℓ / 100 ℓ water (3 mℓ / 10 ℓ water)	Apply 500 litres spray mixture per hectare, when the first Aphid colonies are established. Repeat at 10 to 14-day intervals, using the shorter spray intervals for higher infestation pressures.
	PLUS	Apply a maximum of three (3) consecutive
Potato aphid (<i>Macrosiphum</i> euphorbiae)	20 mℓ	applications per growing season.
	(2 mℓ) Charge	If continued control is required, make use of registered insecticides with a different mode of action.
Stone fruit (including Apricots, Nectarines, Peaches, Plums, Prunes & Cherries)		Apply at the first signs of crawler movement (usually at the onset of fruit development or shortly thereafter).
Pernicious scale (Quadraspidiotus	30 to 40 mℓ / 100 ℓ water	Apply as a full cover spray, ensuring thorough coverage of all plant parts.
perniciosus)		A follow-up application can be made 3 to 4 weeks later. Do not exceed two (2) applications per season.

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

- CHARGE (L 9100 / W 130953 / N-AR 2241) = TECHNIWET SUPER (L9239),
- **DIRECT** (L 8680) = **LINK** (L 8675), and
- VILLA 51 (L 8050 / W 130454 / N-AR 1090) = WEN 51 (L 8315).

CHARGE, VILLA 51, TECHNIWET SUPER, DIRECT and WEN 51 are registered products of

LUTON 240 SC PAGE 8 OF 9

VILLA CROP PROTECTION (PTY) LTD.

LINK is a registered product of UNIVERSAL CROP PROTECTION (PTY) LTD.

PROTANK® LIQUID CLEANER and MASTERLOCK® are registered products of WINFIELD SOLUTIONS REGISTRATION HOLDINGS (PTY) LTD.

LUTON 240 SC PAGE 9 OF 9