


CHRONOS 450 SC

Reg. no. L7276 Act/Wet 36 of/van 1947
N-AR 0868

READ THE LABEL BEFORE USE
KEEP OUT OF REACH OF CHILDREN AND ANIMALS

GROUP	3	FUNGICIDE
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A suspension concentrate fungicide for the control of diseases in the crops indicated.	'n Suspensiekonsentraat swamdoder vir die beheer van siektes in gewasse soos aangedui.
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 WARNING	Hazard statements Very toxic to aquatic life with long lasting effects.
	Precautionary statements Avoid release to the environment. Collect spillage.

ACTIVE INGREDIENT/AKTIEWE BESTANDDEEL

prochloraz zinc complex (imidazole)	530 g/L prochloras-sinkkompleks (imidasool)
prochloraz equivalent	450 g/L prochloras-ekwivalent

NET VOLUME/NETTO VOLUME

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REGISTRATION HOLDER/REGISTRASIEHOUER

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IN CASE OF POISONING, CALL THE FOLLOWING NUMBERS:

Griffon Poison Information Centre:
+27 82 446 8946 or
Tygerberg Poison Information Centre:
+27 861 555 777

EMERGENCY NUMBER:

SPILL TECH: +27 86 100 6366 or +27 83 253 6618

UN no.: 3082

Batch number
Date of manufacture
Expiry date

Lotnommer
Datum van vervaardiging
Vervaldatum



GHS information

WARNINGS

- Very toxic to aquatic life with long lasting effects.

Withholding period (minimum number of days between last application and harvest):

- Allow of 14 days between last application and harvest of mushrooms.
- Apricots, peaches, plums and cherries: do not apply after flowering.

Note: The local maximum residue levels (MRLs) will not be exceeded if **CHRONOS 450 SC** is used according to the label instructions. However, ADAMA South Africa (Pty.) Ltd. cannot be held responsible if export MRLs are exceeded. Consult the local export bodies regarding application timing, withholding periods and specific tolerances of countries to which produce will be exported.

- Store in a cool, well-ventilated place away from food and feed.

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 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 and the occurrence of resistance of the disease 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.

PRECAUTIONS

- If medical advice is needed, have product container or label at hand.
- Keep out of reach of children.
- Read label before use.
- Avoid release to the environment.
- Collect spillage.
- Dispose of contents/ container to an approved waste disposal plant.

- Do not eat, drink or smoke whilst mixing, applying or before washing hands and face.
- Prevent contamination of food, feed, drinking water and eating utensils.
- Wear rubber gloves and a face shield when handling the product in its concentrated form.

- Do not inhale spray mist.
- Avoid contact with the skin and eyes.
- Wash with soap and water after use and/or accidental skin contact.
- Wash contaminated clothing.
- Invert the empty container over the spray or mixing tank and allow to drain for at least 30 seconds after the flow has slowed down to a drip. Thereafter rinse the container three times with a volume of water of at least 10% of that of the container. Add the rinsing to the spray tank before destroying the empty container.
- Avoid drift of spray onto neighbouring crops, grazing, water sources and areas not under treatment.
- Clean applicator after use and dispose of wash and rinse water where it will not contaminate other crops, grazing and water sources.
- Destroy empty container and NEVER use for any other purpose.

RELEVANT SUBSTANCES

Chemical name	w/w %	CAS no.
Prochloraz-Zinc complex	30–60%	137001-93-5
Poly(oxy-1,2-ethanediyl),alpha.-sulfo-.omega.-[tris(1-phenylethyl)phenoxy - , ammonium salt	<10%	119432-41-6

FIRST AID

In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). First aider: Pay attention to self-protection.

Take the container label or product name with you when seeking medical attention.

Eye contact: Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. If symptoms persist, call a physician.

Skin contact: Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Consult a physician if necessary.

Inhalation: Remove to fresh air. If breathing is irregular or stopped, administer artificial respiration. Call a physician.

Ingestion: If conscious, rinse mouth thoroughly with water. Drink plenty of water. Never give anything by mouth to an unconscious or convulsing person. If spontaneous vomiting occurs, have victim lean forward with head down to avoid breathing in of vomit, rinse mouth and administer more water. If symptoms persist, call a physician.



TOXICOLOGICAL INFORMATION

Antidotes

No specific antidote. Treat symptomatically.

Symptoms of human poisoning

None known.

RESISTANCE WARNING

In terms of resistance management, **CHRONOS 450 SC** is classified as a group code 3 fungicide. Any fungus population may contain individuals naturally resistant to **CHRONOS 450 SC** and other group code 3 fungicides. The resistant individuals can eventually dominate the fungus population if these fungicides are used repeatedly. These resistant fungi may not be controlled by **CHRONOS 450 SC** or any other group code 3 fungicide.

To delay fungicide resistance:

- Avoid exclusive repeated use of fungicides from the same fungicide group code. Alternate or tank-mix with products from different fungicide group codes.
- For tank mixing or alternation with products with relevant fungicide group codes, refer to applicable individual product labels.
- Integrate other control methods (chemical, cultural, biological) into fungicide control programmes.

For specific information on resistance management contact the registration holder of this product.

MODE OF ACTION

3: Sterol biosynthesis in membranes: Demethylation inhibitor (DMI).

DIRECTIONS FOR USE

Use only as indicated.

NOTICE TO THE USER: This agricultural remedy is to be used only in according to the directions of this label. It is an offense under the Act to use this product inconsistent with the directions on the label.

Mixing instructions

Half fill the spray tank with clean water. Pre-mix the required quantity of **CHRONOS 450 SC** with a small volume of water. Agitate the water in the spray tank whilst adding the pre-mixed product. Fill the spray tank with water to the required level while maintaining agitation to ensure thorough mixing of the spray solution. Continue to maintain agitation while spraying.

The prepared spray mixture should not be left in the spray tank for any length of time, e.g. overnight. Ensure that agitation takes place prior to the commencement of spraying after normal operation has stopped, e.g. after a lunch break.

APPLICATION RATES

CROPS AND DISEASE	DOSAGE	REMARKS
Apricots, cherries, plums, peaches Blossom blight <i>(Monilinia laxa)</i>	27 ml/100 L water	Apply as a high-volume application at 1200–2000 L spray mixture per hectare. Commence application when 5% of blossoms are in the balloon stage. Repeat every 6–7 days until the end of flowering. Cherries: Do not apply more than five applications per season of products containing prochloraz.
Avocados Postharvest control of anthracose, stem-end rot and <i>Dothiorella</i> and <i>Colletotrichum</i> -complex fruit rot	Dip treatment 180 ml/100 L water + 0.2% HCl	Dip fruit for 30 seconds in the acidified fungicide suspension. Let the fruit dry before storing. NOTE: Care must be taken to ensure the concentration of the dip mixture remains constant by topping up with an acidified suspension made up in a proportion of 180 ml acidified CHRONOS 450 SC per 100 L water. Stir the suspension regularly in the dipping tank.
Bananas Postharvest control of collar rot	Dip treatment 30 ml/100 L water	Cut bunches into hands and dip each individual hand for 5 seconds in the fungicide suspension. NOTE: Care must be taken to ensure the concentration of the dip mixture remains constant by topping up regularly with a suspension made up in a proportion of 30 ml CHRONOS 450 SC per 100 L water. Stir the suspension regularly in the dipping tank.
Citrus Postharvest control of green mould and blue mould	Brush-on treatment 330 ml/100 L water	Apply during the fruit-brushing process before the application of wax. Use in combination with 2,4-D (sodium salt) and thiabendazole. Follow the directions as mentioned on these product labels.
Cultivated mushrooms Dry bubble <i>(Verticillium fungicola)</i>	First application 3.4 ml/m ² in 1.0 L water	Drench with the mixture 7–9 days after casing.

CROPS AND DISEASE	DOSAGE	REMARKS
Wet bubble (<i>Mycogone perniciosa</i>)	Second application 1.4 ml/m ² in 1.0 L water	Drench with the mixture after the first break when the mushrooms have a second flush.
Litchies Postharvest decay (<i>Alternaria spp</i> and <i>Botryodiplodia spp</i>)	Dip treatment 180 ml/100 L water	Dip fruit for 30 seconds into the fungicide suspension at room temperature. Let fruit dry before storing. NOTE: Care must be taken to ensure the concentration of the dip mixture remains constant by topping up with a suspension made up in a proportion of 180 ml CHRONOS 450 SC per 100 l water. Stir the suspension regularly in the dipping tank. DO NOT EXCEED A DOSAGE RATE of 180 ml CHRONOS 450 SC in 100 L WATER.
Mangoes Postharvest control of anthracnose and the suppression of soft brown rot	Export market 180 ml/100 L water Local market 90 ml/100 L water	Dip fruit for 20 seconds into the fungicide suspension at room temperature. IMPORTANT: Fruit should be pre-dipped in hot water for 5 minutes. Water temperature should not exceed 50 °C, especially during the early part of the season and particularly in the case of the cultivars Zill and Irwin. Phytotoxicity can be experienced with treatments with hot water alone during certain seasons. Dip fruit for 2 minutes in a hot fungicide suspension. The water temperature should not exceed 50 °C, especially during the early part of the season and particularly with the cultivars Zill and Irwin. Phytotoxicity can be experienced with treatments with hot water alone during certain seasons.

CROPS AND DISEASE	DOSAGE	REMARKS
Papaya Postharvest control of anthracnose and suppression of stem-end rot	180 ml/100 L water	Dip fruit for 30 seconds into the fungicide suspensions at room temperature. Let fruit dry before storing. NOTE: Care must be taken that the concentration of the dip mixture remains constant by topping up with a suspension made up in a proportion of 180 ml CHRONOS 450 SC per 100 L water. Stir the suspension in the dipping tank regularly.
Potatoes SEED POTATOES ONLY Black dot (anthracnose) <i>(Collectotrichum coccoides)</i> Silver scurf <i>(Helminthosporium solani)</i>	330 ml/1000 kg tubers (seed)	Apply as a low volume spray, preferably with a Spraymiser in 2.0–3.0 L water per 1000 kg tubers (seed). Ensure that the total surface of the tubers is fully covered by the spray mixture. Tubers (potato seed) that will be treated with CHRONOS 450 SC must be lifted as soon as physiological maturity is reached and should be treated as soon as possible. The reason is that the possibility of an anthracnose infection increases towards the end of the growing season and even more after senescence. Tubers (seed) that were not treated directly after harvest can be treated 14 days before planting. CHRONOS 450 SC will not protect tubers from anthracnose if they are planted in infected soil. The progeny tubers will not be protected if the tubers (seed) were originally treated with CHRONOS 450 SC . Tubers (seed) to be treated should be free of soil and other particles as the presence thereof may result in inadequate coverage. IMPORTANT: Only to be used on potatoes that will be used for tubers (seed).
Roses Black spot <i>(Diplocarpon rosae)</i> Powdery mildew <i>(Sphaerotheca pannosa)</i>	110–167 ml/100 L water 110–167 ml/100 L water	Preventive spray: Apply at intervals of 7–10 days using the lower rate. Use the higher rate when disease pressure is high. Corrective spray: Apply the higher rate twice, 5 days apart and thereafter at 7-day intervals until the symptoms disappear. If necessary a suitable wetter may be added. Apply only as a preventive treatment and as a full cover spray. Repeat application every 7



CROPS AND DISEASE	DOSAGE	REMARKS
		days. Use the higher rate when weather conditions are conducive to disease development (viz. hot and humid conditions).