

SEE ENCLOSED LEAFLET FOR FULL DETAILS

CungFu® 538 SC

ZEMA Reg. No.

FUNGICIDE GROUP CODE M1

A suspension concentrate contact fungi and bactericide to control the diseases listed on the crops as indicated.

Active ingredients:

Copper hydroxide 538 g/l
Copper equivalent 350 g/l

Hazard Statement

H302+H332 Harmful if swallowed or if inhaled.
H410 Very toxic to aquatic life with long lasting effects.



Precautionary Statements

P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
P264 Wash thoroughly after handling.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P301 + P312 IF SWALLOWED: Call a POISON CENTRE or doctor/ physician if you feel unwell.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P310 Immediately call a POISON CENTRE.

Manufacturer & Supplier:

Nulandis, a division of AECI LTD
14 Field Road, Lilianton, Boksburg, 1459,
South-Africa
Tel: +27 11 823 8000

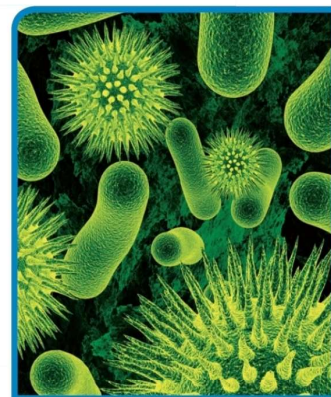


CungFu® 538 SC is a registered trademark of AECI Limited (Nulandis®, a division of AECI Ltd)



Local Distributor:

ATS Agrochemicals Ltd.
Stand 3143, Mukwe Road, Lusaka,
Zambia
Tel: +260 1 246 724-6



Net Volume:

UN No. 3010 - Copper based pesticide liquid toxic

Batch No:
Manufacturing date:
Expiry Date:

P7279



DANGER



CungFu 538 SC

Reg. No. L7526, Act No. 36 of 1947
Botswana Reg. No. W130468, Act. No. 18 of 1999
Malawi Reg. No. MW/PCB/2011/0357
Namibian Reg. No. N-AR 1333

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Active ingredient:
Copper Hydroxide 538 g/l
Copper Equivalent 350 g/l

REGISTERED BY:
Nulandis® (A division of AECL Limited)
Reg. No. 1924/002590/06
P.O. Box 14418
Witfield, 1467
Tel : (011) 823 8000
www.nulandis.com



WARNINGS:
TABLE GRAPES **DO NOT APPLY AFTER BERRIES HAVE REACHED THE PEA SIZE STAGE (4 – 6 WEEKS PRIOR TO HARVESTING)**
AVOCADOS, CITRUS, COFFEE, LETTUCE, MANGOES, **ALLOW 14 DAYS BETWEEN LAST APPLICATION AND HARVESTING POTATOES, PEACHES & PLUMS**
TOMATOES, CRUCIFERAE & BEANS **DO NOT APPLY LATER THAN 3 DAYS BEFORE HARVESTING**
WINE GRAPES **DO NOT APPLY LATER THAN 21 DAYS BEFORE HARVESTING**

May cause eye irritation.
Harmful in contact with skin and when swallowed.
Toxic to aquatic organisms.
Keep out of reach of children, animals and uninformed persons.
Store away from food and feedstuffs.
Re-entry: Do not enter treated area within 1 day after treatment unless wearing protective clothing.
In case of poisoning – CALL A DOCTOR AND MAKE THIS LABEL AVAILABLE TO HIM.
Aerial Application – notify all inhabitants of the immediate area to be sprayed and issue the necessary warnings. Do not spray over or allow drift to contaminate water or adjacent areas.

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 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 TO 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:
CungFu 538 SC should not be applied in a spray solution having a pH of less than 6.5 as phytotoxicity may occur.
Avoid inhalation of spray mist and contact with eyes.
Wear rubber gloves and boots and face shield when preparing the spray mixture.
Do not eat, drink or smoke whilst mixing or applying or before washing hands and face and changing clothes.
Prevent contamination of food, feed, drinking water and eating utensils.
Prevent spray drift onto other crops, grazing, rivers, dams and other areas not under treatment.
Clean applicator thoroughly with **Flushol** before re-using and dispose of wash water where it will not contaminate crops, grazing, rivers, dams or other areas not under treatment. Refer to the **Flushol** label for directions of use.
When empty, invert the container over the spray tank or mixing tank and allow it 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 equal to at least one tenth of that of the container and add the rinsings to the contents of the spray tank. Destroy the container by puncturing and burying or burning it. Do not use the container for any other purpose.

SYMPTOMS OF HUMAN POISONING:
Excessive exposure may cause cough, mucous production, shortness of breath, reflecting metal fume fever. If ingested in large quantities symptoms may include nausea and vomiting, abdominal pain and central nervous system depression.

FIRST AID TREATMENT
Inhalation: If inhaled, remove patient to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Eye contact: Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Warm water MUST be used. Get medical attention immediately.
Skin contact: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Cover the irritated skin with an emollient. Wash clothing before re-use. Thoroughly clean shoes before re-use. Get medical attention.
Ingested: DO NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.

NOTE TO PHYSICIANS:
No specific antidote. Treat symptomatically.

RESISTANCE WARNING:
For resistance management, **CungFu 538 SC** is a group code M₁ fungicide. Any fungus may contain individuals naturally resistant to **CungFu 538 SC** and other group code M₁ fungicides. The resistant individuals can eventually dominate the fungus if these fungicides are used repeatedly. The resistant fungi may not be controlled by **CungFu 538 SC** or any other group code M₁ fungicide.

To delay fungicide resistance:
• Avoid exclusive repeated use of fungicides from the same fungicide group code. Alternate or tank mix with registered products from different fungicide group codes.
• Integrate other control methods (chemical, cultural, biological) into disease control programmes.

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

AERIAL APPLICATION:
Aerial application may only be done by a registered aerial application operator using a correctly calibrated, registered aircraft according to the instructions of SANS Code 10118 (Aerial Application of Agricultural Remedies). It is important to ensure that the spray mixture is distributed evenly over the target area and that the loss of spray material during application is restricted to a minimum. It is therefore essential that the following criteria are met:

Equipment:
• Use suitable atomising equipment (hydraulic nozzles or rotary atomisers) that will produce the desired droplet size and coverage, but which will ensure the minimum loss of product through drift.
• The operator must use a setup that will produce a droplet spectrum with the lowest possible relative span.
• All nozzles / atomisers should be positioned within the inner 60 to 75% of the wingspan to prevent droplets from entering the wingtip vortices.

Application parameters:
• A minimum volume of 30 - 40 l / spray mixture per hectare is recommended. As this product has not been evaluated at a reduced volume rate, the registration holder cannot guarantee efficacy, or be held responsible for any adverse effects if this product is applied aerially at a lower volume rate than recommended above.
• A droplet coverage of 50 - 70 droplets per cm² must be achieved at the target.
• A droplet spectrum with a VMD (Volume Median Diameter) of 250 microns is recommended. Ensure that the production of fine droplets (smaller than 150 microns) is restricted to a minimum.
• The height of the spray boom should be maintained at 3-4 metres above the target. Do not spray when aircraft is in a climb, at the top or during a dive, or when banking.
• Apply before the crop becomes too dense, thus preventing proper coverage of the plants.

Meteorological conditions:
• The difference between the wet and dry bulb readings as determined by a whirling hygrometer, must not exceed 8°C.
• Do not spray under turbulent, unstable conditions during the heat of the day when rising thermals and downdraughts occur.
• Do not spray under temperature inversion conditions (spraying in or above the inversion layer).
• Do not spray if the wind speed exceeds 15 km/h.

General:
• Ensure that fields are accurately marked and that the aerial spray operator knows exactly which fields to spray.
• Obtain an assurance from the aerial spray operator that the above requirements will be met.

DIRECTIONS FOR USE: USE ONLY AS DIRECTED.

COMPATIBILITY:
The use of an adjuvant such as **Bio-Film** (Reg. No. L3694, Act No. 36 of 1947) to enhance the performance of **CungFu 538 SC**, is strongly recommended. **CungFu 538 SC** is compatible with **Designer** (Reg. No. L7378, Act No. 36 of 1947), however, compatibility with other agrochemicals is unknown. Therefore, do not apply in a mixture with other chemicals, unless proved to be safe. Copper should not be mixed with additifs or any compound that increases the systemic uptake of copper.

MIXING INSTRUCTIONS:
Shake CungFu 538 SC container thoroughly before use.
Measure the required volume of **CungFu 538 SC**. Half fill the spray tank with water. Activate the agitator in the spray tank and mix the products in the following sequence: Adjuvant, wettable powder, suspension concentrate and emulsifiable concentrate. Fill the spray tank to the required volume. Maintain agitation throughout mixing and application. Do not leave spray mixture, standing in any spray or supply tank for any length of time. If compatibility is in question, use the "Compatibility Jar Test" before mixing a whole tank. The addition of foliar feeds may result in a reduction of spray water pH. Ensure that the pH of the spray mixture (suspension) is not below 6.5 after the addition of **CungFu 538 SC**, as phytotoxicity may occur.

GENERAL APPLICATION INSTRUCTIONS:
Ensure good coverage of both upper and lower surfaces by applying the recommended water volume and use as a preventative measure. Shorten spray intervals under conditions favourable to the disease concerned. Repeat treatments where more than 13 mm of rain or overhead irrigation was experienced within 72 hours after application.

CROP	DISEASE	APPLICATION RATE (ml / 100 l WATER OR l / ha)	METHOD OF APPLICATION
BEANS	BACTERIAL BLIGHT: HALO BLIGHT (<i>Pseudomonas phaseolicola</i>) COMMON BLIGHT (<i>Xanthomonas phaseoli</i>)	150 ml / 100 l water to a maximum of 1,9 l/ha	Apply every 7 - 14 days depending on disease pressure. Spray immediately after heavy rain, hail or dust storms. Ground application: Depending on plant size, use 500 - 1 000 l spray mixture/ha. Aerial application: Apply in 30 - 40 l water/ha.
COFFEE	RUST (<i>Hemileia vastatrix</i>)	250 ml / 100 l water to a maximum of 3,5 l/ha	Apply as a full cover spray. Begin application in October/November and repeat 4-5 times with 4 week intervals. Apply 1 000 l spray mixture per hectare.
DECIDUOUS FRUIT Plums	BACTERIAL SPOT (<i>Xanthomonas campestris pv. pruni</i>)	150 ml / 100 l water to a maximum of 5 l/ha 75 ml + 200 g spray lime/100 l water to a maximum of 10 l / ha 150 ml + 200 g spray lime/100 l water to a maximum of 5 l / ha 150 ml + 200 g spray lime/100 l water to a maximum of 5 l / ha	AT BUD SWELL STAGE: Apply as a high volume application using 1 200 - 2 000 l spray mixture / ha. PERIOD 90 % PETAL DROP TO 14 - 21 DAYS BEFORE HARVESTING: MODERATELY INFECTED ORCHARDS: Apply as a high volume application at 14 day intervals using 1 500 - 2 500 l spray mixture/ha. SEVERELY INFECTED ORCHARDS: Apply as indicated above. 75 % LEAF DROP: Apply a single application using 1 500 - 2 500 l spray mixture/ha. NOTE: DO NOT APPLY TO THE CULTIVAR RUBY NEL. Spreaders and stickers are not recommended.
Nectarines, Peaches	LEAF CURL (<i>Taphrina deformans</i>)	200 ml / 100 l water to a maximum of 10 l/ha	Apply as a high volume application. Use 1 200 - 2 000 l spray mixture / ha. Apply a single application at bud swell.
GRAPES	DOWNY MILDEW (<i>Plasmopora viticola</i>)	150 ml / 100 l water to a maximum of 2 l/ha	Begin spraying when the shoots are approximately 10 cm long and repeat at 10 - 14 day intervals as long as required.
ORNAMENTALS Roses	BLACK SPOT (<i>Actinonema rosae</i>)	225 ml / 100 l water	Apply at first signs of disease and repeat treatment weekly. Good coverage must be obtained.
Carnations Gladioli	RUST (<i>Uromyces</i> spp.)	375 ml / 100 l water	Begin application when plants are well established (10 - 15 cm high) and repeat treatment at weekly intervals when necessary.
Ornamentals generally	DOWNY MILDEW (<i>Peronospora</i> spp.) RUST (<i>Uromyces</i> spp., <i>Puccinia</i> spp.) LEAF SPOT (<i>Alternaria</i> spp.)	375 ml / 100 l water	Apply at first signs of disease symptoms and repeat as long as necessary at 7 - 10 day intervals.
SUBTROPICAL FRUIT AND CITRUS Avocados	FRUIT SPOT (<i>Pseudocercospora purpurea</i>)	180 ml / 100 l water to a maximum of 12 l / ha + 25 ml Bio-Film	Apply 3 full cover sprays, the first application during middle/end November and repeat at 4 week intervals. The use of a suitable adjuvant is advisable.
Mangoes	BACTERIAL SPOT (<i>Pseudomonas mangiferae-indicae</i>)	225 ml / 100 l water to a maximum of 13,5 l/ha	Apply as a high volume cover spray. Commence spraying at beginning of fruit set and repeat at 14 - 28 day intervals.
Citrus	BLACK SPOT (<i>Guignardia citricarpa</i>) ALTERNARIA SPOT (<i>Alternaria citri</i>)	120 ml / 100 l water to a maximum of 15 l/ha OR 75 ml / 100 g mancozeb to a maximum of 8 l/ha	NORMAL SEASON: Apply 3 high volume cover sprays at 30 - 35 day intervals starting before the end of October. WET SEASON: Apply 4 applications at 30 - 35 day intervals starting at 100 % petal drop. Use with a suitable wetter or sticker. Apply as a high volume cover spray. Commence spraying at balloon stage and repeat at 4 - 6 week intervals (4 - 6 sprays). The number of applications depends on weather conditions during February - April. During wet conditions additional applications are necessary to inhibit further infections.
POTATOES	EARLY BLIGHT (<i>Alternaria solani</i>)	150 ml / 100 l water to a maximum of 2,25 l/ha	Begin spraying before or as soon as the first disease symptoms are noticed. Repeat at 7 - 10 day intervals and after rain. Ground application: Depending on plant size use 500 - 1 500 l spray mixture/ha. Aerial application: Apply in 30 - 40 l water/ha.
TOMATOES	EARLY BLIGHT (<i>Alternaria solani</i>) BACTERIAL SPOT (<i>Xanthomonas vesicatoria</i>) BACTERIAL SPECK (<i>Pseudomonas tomat</i>)	150 ml / 100 l water to a maximum of 3 l/ha	Spray seedbeds weekly. Apply at first signs of disease in tomato fields. Repeat at 7 - 10 day intervals and after rain. Depending on the plant size, use 500 - 2 000 l spray mixture/ha. Where mist blowers are used, apply 2 - 3 l CungFu 538 SC in 500 l water/ha.
VEGETABLES Cruciferae (Cabbage crops)	BACTERIAL SPOT (<i>Pseudomonas maculicola</i>) DOWNY MILDEW (<i>Peronospora parasitica</i>)	150 ml / 100 l water to a maximum of 1,5 l/ha	Apply at 7 - 14 day intervals. Ensure good coverage.
Lettuce	LEAF SPOT (<i>Pseudomonas cichorii</i> , <i>Septoria lactucae</i>)	150 ml / 100 l water to a maximum of 1,5 l/ha	Begin spraying 2 weeks after plants have established and repeat at 7 - 14 day intervals. Ensure good coverage.
SEEDLINGS	DAMPING OFF and other SOIL FUNGI	200 ml / 100 l water	Apply at the rate of 15 l mixture/10 m ² on seedbeds.

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