

Reg. No.: L 5804 Act. 36 of 1947 GROUP 1 FERTILIZER Reg. No. K 4951 Act No. 36 of 1947

Read the label before use Keep out of reach of children and animals.

# FRAC FUNGICIDE GROUP CODE: M1

A wettable powder for the control of fungal diseases as listed on Apples, Pears, Apricots, Avocados, Beans, Boysenberries, Youngberries, Celery, Cherries, Citrus, Coffee, Cotton, Cruciferae, Cucurbits, Granadillas, Grapes, Guavas, Mangoes, Olives, Ornamentals and Flowers, Peaches, Peppers, Plums, Potatoes, Strawberries, Tobacco, Tomatoes and Walnuts

# FRAC SWAMDODERGROEP KODE: M1

'n Benatbare poeier vir die beheer van swamsiektes soos aangedui op Appels, Pere, Appelkose, Aarbeie, Aartappels, Avokodo's, Blomme en Sierstruike, Bone, Boysenbessies, Youngbessies, Druiwe, Granadillas, Katoen, Kersies, Koejawels, Koffie, Koolgewasse, Mango's, Okkerneute, Olywe, Pampoengewasse, Perskes, Pruime, Rissies, Seldery, Sitrus, Tabak en Tamaties



## **Hazard Statements:**

- Harmful if swallowed
- Very toxic to aquatic life with long lasting effects

# **Precautionary statements:**

- Avoid release to the environment
- Wash skin thoroughly after handling

## **ACTIVE INGREDIENT/AKTIEWE BESTANDDEEL:**

Registration holder / Registrasiehouer: Nigelchem cc 18 5th Ave , Vorsterskroon Nigel

Batch No. / Lot Nr.:	
Date of manufacture: / Datum van vervaardiging:	

# COPROX SUPER

#### Registration Holder: Nigelchem, 18 5th Ave, Vorsterskroon, Nigel



Controlled by **ECOCERT SAS** 

#### WARNINGS:

Waiting periods: The following minimum periods between the last application and harvest should be followed. (These withholding periods may not be sufficient to meet export

Table grapes	28 to 42 days
Apples, pears, Apricots, Avocado's, Boysenberries, Youngberries, Cherries, Citrus, Coffee, Guavas, Mangoes, Olives, Peaches, Plums, Potatoes & Strawberries:	14 days
Beans, Cruciferea, Cucurbits, Grannadillas, Tomatoes & Peppers:	3 days
Celery:	1 day
White Grapes:	21 days

- · Very toxic to aquatic life with long-lasting effects
- · Harmful if swallowed
- Keep the container well closed when not in use and store it in a cool, dry place and away from food and feeds.
- Keep out of reach of children, uninformed persons, and animals
- $\cdot$  Re-entry. Do not enter the treated area, until the spray deposit has dried unless wearing

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

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; quality of dilution water, incompatibility with other substances not indicated on the label, and the occurrence of the resistance of the disease or pest 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 be foreseen in terms of the registration. Consult the supplier in any event of uncertainty.

#### PRECAUTIONS:

- Do not inhale dust or spray mist
- Wash skin thoroughly after handling.
  Do not eat, drink, or smoke while using this product.
- $\cdot \ A void \ breathing \ dust/fumes/gas/mist/vapours/spray. \ Use \ only \ outdoors \ or \ in \ a \ well$
- Wash face, hands, and any exposed skin thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection.
- Avoid release to the environment.

  Do not eat, drink, or smoke while mixing or applying the product or before washing hands and face and changing clothing.

  Avoid drifting of spray onto other crops, grazing, rivers, dams, and areas not under
- treatment.
- · Clean application equipment after use. Dispose of wash water where it will not
- contaminate crops, grazing, rivers, dams, and boreholes.

  Containers and packages must be completely emptied before being disposed of. Shake out thoroughly into the mixing tank and destroy the empty container/package thereafter. Destroy the empty container/package by perforation and burying it
- · Never re-use the empty container/package for any other purpose. Do not burn the empty
- container/package.

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

#### RELEVANT SUBSTANCES:

Substance	%
Copper Oxychloride	80 - 90 %

#### RESISTANCE WARNING:

COPROX SUPER is a group code M1 fungicide. Any fungus population may contain individuals naturally resistant to COPROX SUPER and other group code M1 fungicides. The resistant individuals can eventually dominate the fungus population if these fungicides are used repeatedly. These resistant fungi may not be controlled by COPROX SUPER or any other group code M1 fungicide.

## To delay fungicide resistance

- · Avoid exclusive repeated use of fungicide from the same fungicide group code. Alternate or tank mix with products from different fungicide group codes,
  Integrate other control methods (chemical, cultural, biological) into disease control

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

## DIRECTIONS FOR USE: Use only as directed.

#### Compatibility

- · COPROX SUPER is compatible with wettable powders of dicofol, mancozeb, wettable sulphur, spray lime, zinc oxide and manganese sulphate.

  • The product must be used with caution in combination with mercaptothion and captab.
- · Not compatible with lime sulphur.

#### Mixing instructions:

- · Mixed the required quantity of COPROX SUPER with a small volume of water to obtain a
- Add the paste to the required amount of water, stirring continuously to ensure a homogenous mixture.
- Maintain agitation whilst applying.

· Wash the pump and spray tank thoroughly after application and ensure that no COPROX SUPER remains in the container.

#### Applying Instructions:

- Apply COPROX SUPER as a full cover application and ensure coverage of both leaf surfaces
- $\cdot$  COPROX SUPER is a preventive remedy and applications must be made before or at the first signs of an infestation.

#### Aerial Application:

Aerial application of COPROX SUPER 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 Pesticides) 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

- Volume: A spray mixture volume of 30 to 40 litres 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.
- <u>Droplet coverage</u>; 50 to 70 droplets per cm<sup>2</sup> must be recovered at the target area.
   <u>Droplet size</u>: A droplet spectrum with a VMD of 250 microns is recommended. Imit the
- production of fine droplets less than 150 microns (high drift and evaporation potential) to a minimum.
- a minmum.

   <u>Flying height</u>: Maintain the height of the spray boom at 3 to 4 meters above the target. Do not spray when the aircraft dives, is in a climb, or when banking.

   Use suitable atomizing equipment that will produce the desired droplet size and coverage, but which will ensure the minimum loss of product. The spraying system must
- produce a droplet spectrum with the lowest possible Relative Span.

  Position all the atomizers within the inner 60 to 75% of the wingspan to prevent droplets
- from entering the wingtip vortices.

   The difference in temperature between the wet and dry bulb thermometers, of a whirling hygrometer, should not exceed 8 °C.
  • Stop spraying if the wind speeds exceed 15km/h.
- Stop spraying under turbulent, unstable, and dry conditions during the heat of the day.
   Spraying under temperature inversion conditions (spraying in or above the inversion
- layer) and/or high humidity conditions (relative humidity 80% and above) may lead to the following:
  - a) Reduced efficacy due to suspension and evaporation of small droplets in the air (inadequate coverage)
- b) Damage to other sensitive crops and/or non-target areas through drifting of the suspended spray cloud away from the target field.
- Ensure that the Aerial Spray Operator knows exactly which fields to spray.
   Obtain an assurance form the Aerial Spray Operator that the above requirements will be met and that the relevant data will be compiled in a logbook and kept for future reference.

CROP/ DISEASE:	DOSAGE RATE:	REMARKS:
APPLES & PEARS Scab (Fusicla- dium)	250 g/100 ℓ water	Use only at the early green tip stage and only at the early green tip to advanced green tip on pears.
Copper deficiency	400 g/100 ℓ water	Spray after pruning, before the first signs of spring growth.
APRICOTS Bacterial canker	350 - 450 g/100 ℓ water	Depending on the severity of the infection the previous season, apply one or two sprays at 50% and/or 75% leaf drop. If twig and bud infection was observed before bud movement, apply an additional spray at bud movement. Use the higher concentration in autumn and the lower concentration at bud movement. Add 200 grams spray per 100 litres spray mixture.
Bacterial spot	100 - 350 g/100 ℓ water	Post-harvest: Apply at 200 grams plus 200 grams spray lime per 100 litres of water at 75% leaf drop.  Dormant Period: Apply at 350 grams concentration.  90 to 100% Petal fall: Apply at 100 grams plus 400 grams spray lime per 100 litres of water.
Gum spot	350 g/100 ℓ water	Apply at 75% leaf drop at bud movement. Use 200 grams of spray lime with every 100 litres of spray mixture. Repeat at 10 to 14-day intervals, if the weather remains rainy.
Copper deficiency	400 g/100 ℓ water	Spray after pruning, before the first signs of spring growth.
AVOCADOS Fruit spot	300 g/100 ℓ water	Apply three full-cover sprays. Apply the first application middle/end November and repeat at 4-week intervals.
Copper deficiency	250 g/100 ℓ water	Spray after harvesting.
BEANS Bacterial blight	300 g/100 ℓ water	Apply regularly every 7 to 14 days, depending on the weather.
BOYSENBERRIES & YOUNGBERRIES Anthracnose	400 g/100 ℓ water	Apply from budburst until shoots are 2cm long.
<b>CELERY</b> Leaf spot	300 g/100 ℓ water	Apply as a full cover application. Apply up to 2000 litres of spray mixture per hectare, depending on plant size. Repeat at 7 to 14-day intervals.
CHERRIES Bacterial canker	400 g/100 ℓ water	Apply the first application at budswell. Repeat after harvest, beginning of leaf drop, 3 weeks later, and again when all leaves have dropped.
<b>COFFEE</b> Rust	750 g/100 ℓ water	Apply as a full cover spray, commencing in October/November. Apply four to five sprays at 4-week intervals. Use at least 1000 litres of spray mixture per hectare.

APPLICATION DO	SAGE RATES: Note	the withholding periods as indicated
<b>CITRUS</b> Black spot	200g/100ℓ water	Apply as full cover spray, commencing in October/November. Apply four to five sprays at 4-week intervals. Use at least 1000 litres of spray mixture per hectare.
Brown rot	200g/100ℓ water	Apply 3 weeks before harvesting on all fruit up to 1 metre above the soil surface. Spray the stern and soil surface underneath the tree.
Melanose	200g/100ℓ water	Normal season: (Less than 75 mm rain from July to 50% blossom). Apply three applications at 30 to 35-day intervals. Wet season: Apply four applications at 30 to 35-day intervals.
Scab	200g/100ℓ water	Apply to commercial lemons and limes when nearby orange trees have dropped 75 to 100% of their petals.
Copper deficiency	200g/100ℓ water	Spray after harvesting. Before fruit set.
Management of rind stippling in susceptible citrus varieties: Under certain circumstances, some citrus varieties such as mandarins (e.g. Nadorcott, Nova & Clementine) may be susceptible to rind stippling. Avoiad applications to wet fruit, during high relative humidity conditions, during times of the year where there is a high probability of frequent rainfall events all of which may lead to the delayed drying of application droplets or the frequent re-wetting of application copper residue accumulations, as these may contribute to the development of stippling. Avoid applications of copper sprays for disease management after December, as blemishes may occur under the copper residues for cultivars susceptible to rind stippling.		
CRUCIFERAE Bacterial spot	300g/100ℓ water	Apply every 7 to 14 days. Ensure good coverage.

Downy mildew	400g/100ℓ water	Mainly a disease of seedlings. Spray seedlings every 7 to 14 days. Ensure complete light coverage of the entire plant.
CUCURBITS Downy mildew	250g/100 <i>l</i> water	Start application at the first sign of disease. Repeat weekly as long as the weather favours the development of the disease. Depending on foliage cover, apply up to 1500 litres of spray mixture per hectare. Ensure coverage of both the upper and lower leaf surfaces.
GRANADILLAS Leaf and Fruit spot	250g/100ℓ water	Apply at the first sign of disease and repeat 14 days later. Depending on plant size, spray up to 2000 litres of spray mixture per hectare.
GRAPES Anthracnose	300g/100ℓ water	Winter rainfall regions: Apply the first application when shoots are 1 to 2 cm long. Thereafter apply two to three times at 3 weeks intervals.
Bacterial blight	350g/100ℓ water	Apply the first application when shoots are 1 to 2 cm long. Thereafter apply two to three times at 3 weeks intervals.
Botrytis rot	350g/100ℓ water	Apply just before bunches start closing tight.
Dead arm	350g/100ℓ water	Use 250 to 500 litres of spray mixture per hectare. Apply when the longest shoots are 1 to 2cm. Thorough wetting is important. Repeat at 8 to 10-day intervals.
Downy mildew	350g/100ℓ water	Use 250 to 1500 litres of spray mixture per hectare.  Pre-blossom: Apply the first application when shoots are 10cm long. Apply further applications every 7 to 10 days, depending on weather conditions.  Flowering to 80% Calyx fall: Apply only if the blossoming period is longer than 14 days.  Post-blossom: Apply two or more applications at 7 to 14-day intervals, depending on weather conditions.
Copper deficiency	350g/100ℓ water	Spray during winter months, before the start of spring growth.
PEACHES Bacterial canker & Bacterial spot	350 – 450g/100 <i>l</i> water	Depending on the severity of the infection the previous season, apply one or two sprays at 50% and/or 75% leaf drop. If twig and bud infections are observed before bud movement, apply an additional spay at bud movement. Use the higher concentration in autumn and the lower concentration at bud movement. Use the higher concentration in autumn and the lower concentration of bud movement. Add 200 grams of spray lime per 100 litres spray mixture.
Gum spot	350g/100ℓ water	Bud movement: When twigs and buds are infected, apply 350 grams per 100 litres of water. 50% Leaf drop: When infection was heavy in the previous season, apply 350 grams plus 200 grams of spray lime per 100 litres of water. 75% Leaf drop: When infection was light or heavy the previous season, apply at 350 grams plus 200 grams spray lime per 100 litres of water.
Leaf curl	350g/100ℓ water	Apply as a single spray at bud-swell.
Copper defi- ciency	250g/100ℓ water	Spray after pruning, before the first signs of spring growth.
PEPPERS Bacterial spot	400g/100ℓ water	Apply at full cover spray as soon as symptoms are noticed. Repeat at 7 to 10-day intervals, depending on weather conditions.

POTATOES Early blight & Late blight	350g/100 <i>l</i> water	Ground application: Commence spraying before or just when the first symptoms are noticed. Apply every 7 to 10 days depending on weather conditions that favour the development of the disease. Depending on plant size, apply 500 to 1500 litres of spray mixture per hectare to obtain full coverage on both upper and lower leaf surfaces.
	2,5 – 7,5kg/ha	Aerial application: Use 30 litres of water per hectare.
STRAWBERRIES Leaf spot	250g/100ℓ water	Apply every 10 to 14 days, depending on the severity of the disease.
TOBACCO Wild fire	250g/100ℓ water	Seedbeds: Apply at the rate of 12 litres of spray mixture per 3 metres x 3 metres. Ensure full coverage.
TOMATOES Bacterial spot, Early blight & Late blight	350g/100ℓ water	Start application shortly after transplant when plants are about 15 cm and before symptoms appear. Apply every 7 to 10 days, depending on weather conditions favourable for the development of the disease. Depending on plant size, apply 500 to 2000 litres of spray mixture per hectare, to obtain full coverage on both upper and lower leaf surfaces.
WALNUTS Bacterial blight	150 – 300g/100 <i>l</i> water	Apply the first spray at the early pre-blossom stage using a concentration of 300 grams per 100 litres of water. Apply the second spray, using a concentration of 200 grams per 100 litres of water at the late blossom stage, and a final spray, using a concentration of 150 grams per 100 litres of water at full petal drop.
GUAVAS Lumpy disease & Blossom-end rot	200g/100ℓ water	Apply full cover applications in the early stage, until fruit begins to swell. Apply at 30-day intervals for protection against lumpy disease.
Wilting disease	250g/100ℓ water	Sterilise lugboxes by dipping into a suspension to prevent the spread of disease to clean orchards.
MANGOES Anthracnose	250g/100ℓ water	Apply 3 weeks after blossoming when the fruit is pea to marble size and again when the fruit has reached full development.
Bacterial spot	250g/100ℓ water	Post-harvest: Apply at 200 grams plus 200 grams spray lime per 100 litres of water at 75% leaf drop.  Dormant period: Apply at 350 grams concentration.  90 to 100% Petal fall: Apply at 100 grams plus 350 grams spray lime per 100 litres of water.
Copper deficiency	250g/100ℓ water	Apply after harvest.
OLIVES Anthracnose	500g/100ℓ water	Apply the first application in autumn, before discolouration of the fruit begins. Repeat two to three times at monthly intervals.
Leaf spot	500g/100ℓ water	Apply in spring before the new flush appears and again in the autumn before the start of winter.
ORNAMENTALS & FLOWERS Soil pathogens e.g. Damping off, Seed decay & Root rot	250g/100ℓ water	Apply as a soil drench at the rate of 1,5 litres mixture per m² soil surface.
Downy mildew, Various leaf spot diseases & Rust	500g/100ℓ water	Apply every 7 to 14 days, depending on weather conditions favourable for disease. Ensure complete coverage.
ROSES Black spot	300g/100ℓ water	Apply a full cover application when the first symptoms are noticed and repeat weekly. Applications may be discontinued when a dry period is experienced.
PLUMS Bacterial canker	350 - 450g/100 <i>l</i> water	Depending on the severity of the infection the previous season, apply one or two sprays at 50% and/or 75% leaf drop. If twig and bud infections are observed before the bud movement, apply an additional spray at bud movement. Add 200 grams of spray lime per 100 litres spray mixture.
Bacterial spot	100 - 350g/100ℓ water	Post-harvest: Apply at 200 grams plus 200 grams spray lime per 100 litres of water at 75% leaf drop.  Dormant period: Apply at 350 grams concentration. 90 to 100% Petal fall: Apply at 100 grams plus 350 grams spray lime per 100 litres of water.
Gum spot	350g/100ℓ water	Apply at 75% leaf drop and again at bud movement.
Copper deficiency	400g/100ℓ water	Spray after pruning, before the first signs of spring growth.