

Copstar 120 SC[®]



FUNGICIDE

Reg. No. L7026 Act No. 36 of 1947

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

FRAC FUNGICIDE GROUP CODE M 01

Copstar 120 SC is a copper-containing suspension concentrate fungicide and bactericide for the control of diseases in crops as indicated.



DANGER

HAZARD STATEMENTS:

Causes mild skin irritation.
Causes serious eye damage.
Harmful if inhaled.
Very toxic to aquatic life.
Very toxic to aquatic life with long-lasting effects.

PRECAUTIONARY STATEMENTS:

Keep out of reach of children.
Avoid breathing dust/fumes/gas/mist/vapours/spray.

ACTIVE INGREDIENT

Copper hydroxide
(equivalent to 120 g/ℓ metallic copper)

180 g/ℓ

SG = 1.16

Product approved for use in organic farming according to Reg. (EU) 2018/848: Annex I, Copper compounds. NOP: §205.601(i)(2)



Rolfes
Agri

Emergency contact details

Office Hour Poisoning Helpline
Rolfes Agri (Pty) Ltd.
Tel: +27 (12) 803 0145

Registration Holder: Rolfes Agri (Pty) Ltd.
(Reg. No. 1998/013411/07) • 288 Mundt Street, Waitloo, 0184
Gauteng, RSA. • Tel: (012) 803-0145

Spill Response and Transport incidents

Spill Tech, Oil and chemical pollution control
Tel: +27 (86) 100 0366 / +27 (83) 253 6618
www.spilltech.co.za

Shake well before use • Store at room temperature
Keep out of direct sunlight • Keep container closed when not in use



LIFT HERE

WARNINGS:

- **Withholding periods:** Minimum number of days between last application and harvest:

• Pome fruit	14 days
• Avocados	14 days
• Leguminous beans	3 days
• Citrus	14 days
• Coffee	14 days
• Brassica vegetable/Cruciferae	3 days
• Grapes (table)	4 – 6 weeks
• Grapes (wine)	21 days
• Mangoes	14 days
• Onions bulb group	14 days
• Stone fruits	14 days
• Potatoes	14 days
• Tomatoes	3 days

The local maximum residue (MRL's) levels will not be exceeded provided this product is used according to the label instructions. However, local MRL levels may not meet export requirements, therefore when produce is destined for the export market, the relevant export agency must be contacted prior to the use of this product regarding application timing, withholding periods and specific tolerances of the destination country.

DISCLAIMER

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 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 the 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 container or label at hand.
- Keep out of reach of children.
- Read carefully and follow all instructions.
- Avoid breathing dust/fumes/gas/mist/vapours/spray.
- Wash hands and affected area thoroughly after handling. Do **NOT** touch eyes.
- Use only outdoors or in a well-ventilated area.
- Avoid release to the environment.
- Wear eye protection/face protection.
- **IF INHALED:** Remove person to fresh air and keep comfortable for breathing.
- **IF IN EYES:** Immediately rinse with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- If skin irritation occurs: Get medical help.
- Collect spillage.
- Empty all contents from the container by placing it upside down over the spray tank and holding it there for at least 30 seconds. Puncture the rinsed container to render it useless and send to a recycler.
- Store in a cool, dry place away from food and feed.
- In case of poisoning, call a doctor and show him/her this label.
- **RE-ENTRY INTERVAL:** Do **NOT** enter treated area within 1 day after treatment unless wearing protective clothing.

RELEVANT HAZARDOUS SUBSTANCES:

Copper Hydroxide 10 – 30%

Symptoms of human poisoning:

Ingestion can cause diarrhea and stomach pain. Certain individuals may be sensitive to copper. If product gets into the eyes, it causes substantial but temporary eye irritation. Inhalation may cause respiratory tract irritation.

FIRST AID TREATMENT:

Ingestion: If exposed or concerned, rinse mouth thoroughly with large amounts of water and get medical help.

Skin contact: Gently wipe off residual chemical and wash skin thoroughly with water and non-abrasive soap. If irritation persists, get medical help.

Eye contact: Flush eyes immediately with large amounts of flowing cold water for 15 – 20 minutes, until no evidence of chemical remains. If irritation persists, get medical help.

Inhalation: Remove the affected victim from exposure to an area with fresh air. If breathing has stopped, administer artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If irritation persists, get medical help.

NOTE TO PHYSICIAN: Treat symptomatically.

RESISTANCE WARNING:

For resistance management, **COPSTAR 120 SC**[®] is a group code M1 fungicide. Any fungus population may contain individuals naturally resistant to **COPSTAR 120 SC**[®] 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 **COPSTAR 120 SC**[®] or any other group code M1 fungicides.

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 programs.

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

USE RESTRICTIONS

Max level of copper per ha are not to be exceeded.

DIRECTIONS FOR USE: USE ONLY AS DIRECTED

COMPATIBILITY: DO NOT apply **COPSTAR 120 SC**[®] in combination with any acidifying products such as zinc nitrate (ZnNO₃), ammonium sulphate (NH₄SO₄), amino-acid chelated foliar feeds or any other acidifying or chelated kelp, fulvic and humic acid based products, or apply these products to the fruit and leaves within 30 days after a copper application. **DO NOT** apply citric acid containing products such as potassium citrate or calcium or magnesium citrate in combination with or within 30 days after a **COPSTAR 120 SC**[®] application. **COPSTAR 120 SC**[®] is compatible with **FIGHTER**, **Mancozeb 800 g/kg** and **AG-THRAM**. Consult with a Rolfes representative.

IMPORTANT NOTES: It is essential that **COPSTAR 120 SC**[®] be kept agitated throughout the entire mixing and spraying operation. **COPSTAR 120 SC**[®] is a preventive spray and application must be carried out before or just as the first signs of the disease are noticed. **DO NOT** exceed max rate per ha as per registered **FIGHTER** label.

ENVIRONMENTAL CONDITIONS: DO NOT apply **COPSTAR 120 SC**[®] under adverse weather conditions causing stress to the crop, such as high or low temperatures, high or low humidity, rain or frost. **DO NOT** apply when the fruit is still wet as a result of rain or dew, or if rain is imminent or expected, or under **ANY** circumstance where slow drying conditions might prevail or be expected as under the above conditions phytotoxicity/injury/stippling may occur. **DO NOT** apply during periods of water stress.

Citrus:

Successive **COPSTAR 120 SC**[®] applications, adverse environmental conditions, late applications (March–April) or acidifying products can cause stippling of fruit. To avoid stipple formation, replace every second application with Mancozeb. **DO NOT** apply **COPSTAR 120 SC**[®] with any buffers or acidifiers, or any other adjuvants before consulting a qualified agronomist.

COPSTAR 120 SC is a registered Trademark of Rolfes Agri (Pty) Ltd.

AG-THRAM 800 WP (Thiram 800 g/kg). L8175 Act No. 36 of 1947, registered by Rolfes Agri (Pty) Ltd.

FIGHTER (Potassium phosphite 555 g/L7330 Act No. 36 of 1947, registered by Rolfes Agri (Pty) Ltd).

AQUA-WET (Alcohol ethoxylate, glycol ether, fatty acids 900 g/L) L6204 Act No. 36 of 1947, registered by Rolfes Agri (Pty) Ltd.

CROP AND DISEASE	DOSAGE RATE	REMARKS
Pome fruit (Apples&Pears) Scab (<i>Venturia inaequalis</i>)	170 ml/100 ℓ water OR 170ml/100ℓ water + 6 ℓ/ha FIGHTER	Apply 2 applications with a 7 day interval. Spray at green tip stage.
Avocados Fruit spot (<i>Pseudo-cercospora purpurea</i>)	350 ml/100 ℓ water	Start applications early in November and repeat every 4 weeks. Apply 3 – 4 full cover applications during the season. Will also control Anthracnose if present at time of application.
Leguminous Beans (Beans, Broad Beans, Cow Peas, Chick Peas, Garden Peas, Pigeon Peas and Peas (peas or bean means shelled with pods, whole unshelled, without pods or dry) Bacterial blight (<i>Common and halo</i>)	350 ml/100 ℓ water	Apply every 7 – 14 days depending on the disease pressure. Spray immediately after heavy rains, hail or dust storms.
Citrus (Lemons, Limes, Grapefruit or Pomelos, Oranges, Mandarins (including Clementines, Satsumas, Naartjies and Tangerines) and Tangelos) Black spot (<i>Guignardia citricarpa</i>)	350 ml/100 ℓ water	Start COPSTAR 120 SC ® applications before mid October. Apply 3 more high volume sprays at 30 – 35 day intervals during the susceptible period from October to end December. During high rainfall season, a fourth application may be necessary.
Alternaria spot (<i>Alternaria alternata</i> pv. <i>citri</i>)	250 ml/100 ℓ water + 100 g/100 ℓ water Mancozeb 800 g/kg	Apply as a high volume cover spray. Begin application at first flush (± middle September) and repeat every 28 days until harvest.
Coffee Rust (<i>Hemileia vastatrix</i>)	550 ml/100 ℓ water	Apply as a full cover application, commencing before rust symptoms appear. Apply 4 – 5 sprays at 4 week intervals. Apply at least 1000 ℓ spray mixture per hectare.
BRASSICA VEGETABLE /CRUCIFERAE (Brussels Sprouts, Broccoli, Cabbage (including all varieties), Kale, Kohlrabi, Cauliflower Pakchoi and Collards) Downy mildew (<i>Peronospora parasitica</i>)	350 ml/100 ℓ water	Apply every 7 – 14 days. Ensure good coverage of the whole plant.
WINE & TABLE GRAPES Downy mildew (<i>Plasmopara viticola</i>)	350 ml/100 ℓ water OR 350 ml/100ℓ water + 350 ml/100ℓ water FIGHTER OR 350 ml/100ℓ water + 6 ℓ/ha FIGHTER	Start spraying when shoots are approximately 10 cm long and repeat every 10 – 14 days depending on weather conditions. Ensure thorough coverage of the vines. Increase the spray volume progressively from 500 ℓ to 1500 ℓ/ha, depending on the vine growth. NB: Do NOT apply after pea berry stage (4 – 6 weeks before harvest).
Mangoes Bacterial spot (<i>Xanthomonas campestris</i>)	350 ml/100 ℓ water	Apply at 2 – 4 week intervals from just after fruit set until harvest. The product is especially suited for application as the last two sprays at the end of a spray program.
Onion Bulb group (all varieties of Bulb Onions, Spring Onions, Shallots, Chives, Garlic and Leeks) Downy mildew (<i>Peronospora destructor</i>)	350 ml/100 ℓ water	Apply 3 – 4 applications with 10 – 14 day intervals. Apply in 300 – 500 ℓ water per hectare, depending on plant size. Start as soon as the disease is noticed, or when weather conditions are conducive to the development of the disease. Ensure complete spray coverage.
Stone fruits (Apricots, Cherries (sweet and sour), Nectarines, Peaches, Plums and Prunes) Leaf curl (<i>Taphrina deformans</i>)	450 ml/100 ℓ water OR 450 ml/100 ℓ water + 140 g/100 ℓ water Ag-Thiram 800 WP	Apply as a full cover spray at 60 % leaf drop and at bud swell. Add AQUA-WET at a rate of 18 ml per 100 ℓ spray water.
Potatoes Early blight (<i>Alternaria solani</i>)	350 ml/100 ℓ water	Commence application before or just when first symptoms are noticed. Apply every 7 – 10 days depending on weather conditions favourable for the development of the disease. Depending on plant size, apply at 500 – 1500 ℓ spray mixture per hectare. Ensure thorough coverage of both upper and lower leaf surfaces. Repeat application after more than 13 mm of rain or overhead irrigation.
Late blight (<i>Phytophthora infestans</i>)	350 ml/100 ℓ water + 200 g Mancozeb 800 g/kg WP OR 350 ml/100 ℓ water + 3 ℓ/ha FIGHTER	Start preventive application before the first signs of the disease, depending on conditions favourable for the development of late blight infections. Apply at 7 – 10 day intervals. If late blight is present in a field, spray intervals should be shortened to 5 days. Low volume application: 200 – 300 ℓ water per hectare. High volume application: Apply 1500 ℓ spray mixture per hectare. Ensure full coverage of both upper and lower leaf surfaces. Repeat application after more than 13 mm rain or overhead irrigation.
Tomatoes Early blight (<i>Alternaria solani</i>)	350 ml/100 ℓ	Start application shortly after transplant when plants are 15 cm high and before symptoms appear. Apply every 7 – 10 days depending on weather conditions favourable for the development of the disease. Depending on plant size, apply at 500 – 2000 ℓ spray mixture per hectare. Ensure that both the upper and lower leaf surfaces are treated. Repeat application after more than 13 mm rain or overhead irrigation.
Bacterial spot Bacterial speck	350 ml/100 ℓ	Apply as a preventive spray at 7 – 10 day intervals. Depending on plant size, apply at 500 – 1500 ℓ spray mixture per hectare. Ensure thorough coverage of both the upper and lower leaf surfaces. Repeat application after more than 13 mm of rain or overhead irrigation.
Bacterial speck (on seedlings)	350 ml/100 ℓ	Spray seedlings at weekly intervals, using hollow cone nozzles.