

Reg. No. 19-B-2-88

COPPER OXYCHLORIDE 85WP

FUNGICIDE

A fungicide for the control of certain diseases in agricultural and horticultural crops, in flowers and ornamentals.

Composition	mass/mass
Copper oxychloride	85 %
Inert ingredients	15 %
 Chemical group:	 Inorganic Compound



TO CAUSE A HAZARD IN THE USE, STORAGE OR DISPOSAL OF THIS SUBSTANCE IS AN OFFENCE.

KEEP OUT OF REACH OF CHILDREN



1. Triple rinse clean container after use
2. Punctures holes in bottom
3. Return to Maguires Recycling Facilitator / Return to nearest recycling facility

NOVA-AGRO
CHEMICALS

4 Hood Rd | Southerton | Harare

DIRECTIONS FOR USE:

Use only as directed

Ensure adequate creaming before dilution. Agitate the spray mixture constantly whilst spraying. Apply when the foliage is dry as a full cover spray so as to wet plants thoroughly.

Crop	Disease	Mixture of Copper Oxychloride in water	Application	Min. days from last spray to harvest
Citrus	Black spot	200g/100 litre	Apply at 75% petal drop as a cover spray. Repeat twice at 4-5 week intervals.	14
Coffee	Rust	5-8kg/ha	Apply in sufficient water to give thorough coverage.	14
Potatoes	Early and Late blight	500g/100 litre	Use at the rate of 550 to 1100 litre per hectare, commencing when the potatoes emerge. Repeat every 7 days or after every 40mm of rain.	14
Tobacco Seedbeds (Always consult the TRB Handbook)	Wildlife Angular leaf spot		Apply weekly. Start spraying four weeks after emergence.	N.a.
		300g-500g/100 litres	High volume spray: Apply the sprays at 200ml/m ² and increase as the seedlings grow to a max. of 500ml/m ² . If either disease is seen, apply the higher dosage in 500ml/m ² , to give complete coverage.	
		100g-465g/litre	Ultra low volume spray: Apply at 4,0ml/m ² and if disease is seen, increase the dosage rate.	
Tomatoes	Early and late blight	500g/100 litre	Apply as overall spray before disease appears. Repeat at 7-day intervals or in the summer after every 40mm of rain, whichever is the soonest.	3

COMPATIBILITY

The manufacturers stress that it is preferable to use this product on its own; furthermore, the quality of water in a mixture may adversely affect its compatibility. The suggestions below are therefore guidelines only, and all responsibility is disclaimed for lack of effectiveness, damage or loss of any kind from mixing this product with another. The manufacturers strongly recommend a trial mixture be taken with water intended for use in the main mixture. Subject to the above, this product may normally be mixed at those water concentrations common in the use of conventional ground spraying equipment with any ONE of the following: Mancozeb 80WP, Dimethoate EC, Carbaryl 85WP, Endosulfan 35EC and Endosulfan 50WP.

In tobacco however, this product should not be mixed with any other fungicides used in seedbeds.

PRECAUTIONS:

1. Handle with care and avoid any contact with the pesticide.
2. WEAR PROTECTIVE CLOTHING i.e. gloves and overalls.
3. Do not eat, drink or smoke while applying this pesticide.
4. DANGEROUS TO ANIMALS, BIRDS, FISH AND BEES.
5. KEEP OUT OF REACH OF CHILDREN AND AWAY FROM FOODS AND STORE UNDER LOCK AND KEY.
6. Destroy empty container – DO NOT use for any other purpose.

FIRST AID:

Should accidental poisoning occur call a doctor and show him this label. In case of contact with: - Eyes: Wash eyes with clean water for at least 15 minutes. Skin: Remove contaminated clothing. Wash skin with plenty of soap and water. If swallowed, induce vomiting. If inhaled, remove patient to fresh air and loosen clothing around the throat and chest.

ANTIDOTE:

No known antidote.

WARRANTY:

The excellent results which this chemical should normally yield are not however warranted or guaranteed, as effectiveness can be greatly influenced by factors outside the control of either the manufacturers or the suppliers. No warranty whatsoever, express or implied, is therefore given concerning the performance or effectiveness of this chemical and responsibility is specifically excluded for any damage, injury or loss of any kind during or resulting from its improper handling, use or storage, whether or not such has been in accordance with directions.

DATE OF MANUFACTURE:**BATCH NO:**

Manufactured by:

NOVA AGRO (HK) LTD
28/F Tesbury Centre
28 Queen's Road East
Wanchai, HONG KONG

Registration held by/distributed by:

NOVA-AGRO
CHEMICALS

4 Hood Road | Southerton | Harare



NOVA AGRO (HK) LTD
(Reg. No. 1023146)
6th Floor Wyndham Place
44 Wyndham Street
CENTRAL HONG KONG.

Material Safety Data Sheet (MSDS)

Copper oxychloride 850WP

Section 1: Chemical Product and Company Identification

Product Name: COPPER OXYCHLORIDE 85WP
CAS#: 1332-65-6
Chemical Name: Copper oxychloride
Chemical Formula:
Contact Information: NOVA AGRO (HK) LTD.
(Reg. No. 1023146)
6th Floor Wyndham Place
44 Wyndham Street
CENTRAL HONG KONG.

Emergency telephone: +27 (0) 83 676 1998

Section 2: Composition and Information on Ingredients

Composition:	Name CAS #	% by Weight
Copper oxychloride	1332-65-6	85

Section 3: Hazards Identification

Acute Health Effects: Irritating to the skin and eyes on contact. Inhalation will cause irritation to the lungs and mucus membrane. Irritation to the eyes will cause watering and redness. Reddening, scaling, and itching are characteristics of skin inflammation. Follow safe industrial hygiene practices and always wear protective equipment when handling this compound.

Chronic Health Effects: Chronic copper poisoning is typified by hepatic cirrhosis, brain damage and demyelination, kidney defects, and copper deposition in the cornea as exemplified by humans with Wilson's disease. It has also been reported that copper poisoning has lead to hemolytic anemia and accelerates arteriosclerosis.

Section 4: First Aid Measures

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. Get medical attention if irritation occurs.

Skin Contact:

In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.

Inhalation:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Ingestion:

Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.

Section 5: Fire and Explosion Data

Flammability : Non-Flamable

Flash Points : Not Applicable

Auto-Ignition : Not Applicable

Flammable Limits: Not Applicable

Extinguishing Media: Water spray, Dry chemicals, Carbon Dioxide, fog or foam

Fire Fighting Procedure: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

Fire/Explosion Hazards: May emit toxic chlorine gas under certain conditions.

Section 6: Accidental Release Measures

Spill or Leak Procedures: Utilize recommended protective clothing and equipment. Clean spills in a manner that does not disperse dust into the air. Spill area can be washed with water. Collect wash water for approved disposal. Keep from entering water or ground water

Section 7: Handling and Storage

Storage Temperatures: Store at ambient temperature

Shelf Life: Unlimited in tightly closed container.

Special Sensitivity: None

Handling/Storage Precautions: Avoid breathing dust. Avoid getting in eyes or on skin. Wash thoroughly after handling. Store in a dry place away from direct sunlight, heat and incompatible materials (see Section 10). Reseal containers immediately after use. Store away from food and beverages.

Section 8: Exposure Controls/Personal Protection

Eye Protection: Safety glasses or goggles.

Skin Protection: PVC gloves with impervious boots, apron or coveralls. Employees should wash their hands and face before eating, drinking or using tobacco products.

Respirator: Work ambient concentrations should be monitored and if the recommended exposure limit is exceeded, a NIOSH/MSHA approved dust respirator must be worn.

Ventilation: Use local ventilation if dusting is a problem, to maintain air levels below the recommended exposure limit.

Additional Protective Measures: Emergency showers and eye wash stations should be available. Educate and train employees in the safe use and handling of hazardous chemicals.

Section 9: Physical and Chemical Properties

Physical Form:	Powder
Colour:	Blue to Green
Odour:	Odourless
Molecular Weight:	427.2
Boiling Point:	Decomposes at 300°C
Melting/Freezing Point:	Decomposes at 300°C
Solubility in Water:	Insoluble
Specific Gravity:	3.7

Section 10: Stability and Reactivity Data

Stability: Stable

Hazardous Polymerization: Will not occur

Incompatibilities: Acids

Instable Conditions: Excessive temperatures (see Incompatibilities).

Decomposition Temperature: Decomposes at 300°C

Decomposition products: Oxides of Copper and Chlorine

Section 11: Toxicological Information

Routes of Exposure: Eye contact. Ingestion. Inhalation. Skin contact.

Toxicity Data: Acute oral LD₅₀ (rat) >700mg/kg.

Chronic Toxic Effects: Chronic copper poisoning is typified by hepatic cirrhosis, brain damage and demyelination, kidney defects, and copper deposition in the cornea as exemplified by humans with Wilson's disease. It has also been reported that copper poisoning has lead to hemolytic anemia and accelerates arteriosclerosis.

Acute Toxic Effects: Irritating to the skin and eyes on contact. Inhalation will cause irritation to the lungs and mucus membrane. Irritation to the eyes will cause watering and redness. Reddening, scaling, and itching are characteristics of skin inflammation. Follow safe industrial hygiene practices and always wear protective equipment when handling this compound.

Section 12: Ecological Information

Ecotoxicity: Not available.

Section 13: Disposal Considerations

Waste Disposal:

Waste must be disposed of in accordance with federal, state and local environmental control regulations.

Section 14: Transport Information

Proper Shipping Name: Copper oxychloride

UN Number: N/A

Class: N/A

P.G.: N/A

Label Code: N/A

Section 15: Other Regulatory Information

OSHA Status: This product is hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29 CFR 1910.1200.

TSCA Chemical Inventory: This compound is on the EPA Toxic Substance Control Act (TSCA) inventory List California Proposition 65: To the best of our knowledge, this product contains no levels of listed substances, which the state of California has found to cause cancer, birth defects or other reproductive effects.

SARA 313 Title III:

Extremely Hazardous Substances: None

Hazardous Categories: None

Toxic Chemicals: This product may be subject to reporting. Copper Content 55.0 –59.5%

Section 16: Other Information

The information contained herein is based on the present state of our knowledge as is intended to describe our products from the point of view of safety requirements. It should not therefore be construed as guaranteeing specific properties.
