

ECLIPSE ST

SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product name: ECLIPSE ST
Other identifier: Metalaxyl 350 g/kg WS
Recommended use: Fungicide seed treatment
Restrictions on use: Agriculture

Registration Holder: Meridian Agrochemical Company (Pty) Ltd
Co. Reg. No.: 2000/010819/07
PO Box 801,
Kempton Park, 1620, South Africa
Telephone: (011) 396 2233
Fax: (011) 396 4666
Website: www.villacrop.co.za

Emergency telephone numbers:
24 Hr Transport / Spill emergency no:
(Hazcall24) +27 86 044 4411
(Client: Villa Crop Protection)
Griffon Poison Information Centre +27 82 446 8946
(Client: Villa Crop Protection)
Poisoning Emergency telephone numbers:
Griffon Poison Information Centre +27 82 446 8946
Poisons Information Centre +27 861 555 777

2. HAZARDS IDENTIFICATION

UN GHS, Regulation EC 1272/2008 [EU-GHS/CLP] EU & SANS 10234:2008		
Hazard classes	Hazard categories	H-statements
Health		
Dermal	Skin Sen. 1	H317
Environment		
Aquatic chronic	Aquatic chronic 3	H412

The most important adverse effects:
Physiochemical effects: None known.
Human health effects: May cause an allergic skin reaction.

Label elements:



Signal word: Warning

Hazard statements:

H317: May cause an allergic skin reaction.
H412: Harmful to aquatic life with long lasting effects.

Precautionary statements:

P272: Contaminated work clothing should not be allowed out of the workplace.
P273: Avoid release to the environment.
P280: Wear impervious rubber gloves and boots, protective clothing and chemical safety goggles.
P302+P352: IF ON SKIN: Wash with plenty of water and non-abrasive soap.
P333+P317: If skin irritation or rash occurs: Get medical help.
P501: Dispose of content/container to suitable landfill in accordance with local regulations.

Other hazards:

None known.

Toxicity:

Classification according to GHS: Unclassified

3. COMPOSITION / INFORMATION ON INGREDIENTS

Substance / Mixture: Mixture

Composition:

Chemical name	CAS	Conc. (m/m %)	Classification EC 1272/2008
Metalaxyl	57837-19-1	35.72%	Acute Tox. 4 * (H302) Skin Sens. 1 (H317) Aquatic Chronic 3 (H412)

4. FIRST AID MEASURES

Remove the victim from the area of exposure. Wash off remaining material with plenty of water. In the event of any complaints or symptoms, avoid further exposure and consult a doctor. If exposed or concerned, get medical advice.

Inhalation: Remove person from contaminated area to fresh air and assist breathing as needed. Get emergency medical help immediately if irritation occurs.

Skin: Remove contaminated clothing and footwear. Wash affected areas with soap and water. Seek medical assistance should irritation persist. Obtain medical attention if irritation or rash occurs.

ECLIPSE ST

SAFETY DATA SHEET

Eyes: Flush eyes with clean water for at least 15-20 minutes. Lift eyelids to facilitate irrigation. If present, remove contact lenses after 5 minutes and continue rinsing. Seek medical attention.

Ingestion: Seek medical assistance if large amount is ingested or if feeling ill. Never give anything by mouth to an unconscious person. If the person is alert, rinse mouth thoroughly with water. For advice, contact the National Poisons Centre

Anticipated acute effects: May cause an allergic skin reaction.

Anticipated delayed effects: None known.

Most important symptoms / effects: None known.

Advice to physician: Treat symptomatically and supportively. No specific antidote known.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media: Use Water spray, carbon dioxide or dry chemical for small fires and water fog or foam for large fires.

Unsuitable Extinguishing Media: High volume water jet. Use a water jet only to cool heated containers.

Specific hazards: Not a fire and explosion hazard. Like most organic powders or crystals, under severe dusting conditions, this material may form explosive mixtures in air. Generating poisonous and corrosive fumes containing oxides of carbon and nitrogen.

Special fire-fighting procedures: Remove spectators from surrounding area. Isolate the fire area and evacuate all personnel downwind of the fire. Fight fire from maximum distance and use unmanned hose holder or monitor nozzles. Remain upwind of fire. Avoid inhaling hazardous vapours and fumes from burning materials. Remove container from fire area if possible and without risk. Do not use high volume water jet, due to contamination risk. Do not scatter the burning material. Water can be used to cool unaffected containers but must be contained for later disposal. Contain fire control agents for later disposal. On small fires, if area is heavily exposed to fire and if conditions permit, let fire burn itself out since water may increase the contamination hazard. Avoid pollution of waterways by run-off from the site.

Personal protective equipment: Wear NIOSH / MSHA approved self-contained breathing apparatus and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Avoid contact with skin and eyes. Do not breathe in spray or fumes. For personal protection see Section 8.

Protective equipment: Refer to Section 8 for personal protective equipment to be worn during containment and clean-up of a spill involving this product.

Emergency procedures: Alert firefighting personnel, evacuate unprotected personnel and animals.

Environmental Precautions: Prevent spilled product from entering sewers, waterways or ground water. This product is classified as harmful to aquatic life with long lasting effects. Any spillages or uncontrolled discharges into watercourses should be reported immediately to the police and the Department of Water / Environmental Affairs.

Methods and Materials for Containment: Contain spilt product by diking area with sand or earth.

Methods and Materials for Clean-up: Contain spilt product by picking up with an electrically protected vacuum cleaner or by wet-brushing and transfer to a container for disposal. Do not create a powder cloud by using a brush or compressed air. Label containers with the contents and dispose of according to local regulations. Do not place spilt material back in original container. Do not re-use spilt material. To decontaminate the spill area, tools and equipment, wash with water and suitable detergent. Collect washings and add to the drums already collected. Do not flush spilt material or washings into drains or waterways. See section 13 for disposal considerations.

7. HANDLING AND STORAGE

Handling:

Precautions for safe handling: Avoid skin and eye contact and inhalation of spray mist. Ensure adequate ventilation during handling and use. Do not handle broken packages without protective equipment. Immediately clean up spills that occur during handling. Keep containers closed when not in use. In the case of contact with the product refer to First Aid Measures – Section 4.

General occupational hygiene: Practice good hygiene when using this material. Wash hands before eating, drinking, chewing gum, smoking, using the toilet or applying cosmetics. Worker should shower at

ECLIPSE ST

SAFETY DATA SHEET

the end of each workday. Launder all clothing before it is re-used.

Storage:

Conditions for safe storage: Keep under lock and key and out of reach of unauthorised persons, children and animals. Store in its original, labelled container, tightly closed in an isolated, dry, cool and well-ventilated area. Avoid excess heat. Not to be stored next to foodstuffs, feed and water supplies. Avoid cross contamination with other pesticides and fertilisers.

Incompatible substances and mixtures: Refer to product label.

Packaging material: Bags

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Permissible concentration

Compon-ents	Exposure limits	Type of exposure limit	Source
Kaolin	10 mg/m ³	10-hour TWA	www.osha.gov

Engineering Controls:

It is essential to provide adequate ventilation. The measures appropriate for a particular worksite depend on how this material is used and on the extent of exposure. Local Exhaust: Provide general or local exhaust ventilation systems to maintain airborne concentrations below OELs or other specified exposure limits. Local exhaust ventilation is preferred. Ensure that control systems are properly designed and maintained. Comply with occupational safety, environmental, fire and other applicable regulations.

Personal Protective Equipment:

Respiratory Protection: For most well-ventilated conditions, no respiratory protection should be needed. If used in a poorly ventilated area (airborne concentrations exceed exposure limits), use a NIOSH approved, air-purifying respirator with cartridges / canisters approved for organic vapours.

Hand Protection: Employees must wear chemically protective impervious gloves to prevent against skin contact.

Eye Protection: Employees must wear chemical safety goggles to prevent against eye contact. Contact lenses are not protective eye devices.

Skin and Body Protection: Employees must wear appropriate protective impervious clothing, boots, hat

and equipment to prevent repeated or prolonged skin contact with this substance.

Emergency eyewash: Where there is any possibility that an employee's eyes may be exposed to this substance, the employer should provide an eye wash fountain or appropriate alternative within the immediate work area for emergency use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Solid granule. Beige in color.

Odour: Characteristic.

Odour threshold: Not available.

pH (1% aqueous dilution): 6.5 - 8.5

Melting point: Not available.

Freezing Point: 63.5 – 72.3oC (Metalaxyl)

Boiling Point: 295.9oC/757 mmHg (Metalaxyl)

Flash Point: Not applicable to solids.

Flammability: Not applicable to solids.

Upper / lower explosion limits: Not available.

Vapour Pressure (mm Hg): 0.75 mPa @ 25 °C (Metalaxyl)

Relative Vapour Density: Not available.

Bulk density: Not available.

Solubility: Water 8.4 g/L (22 °C).

n-octanol / water partition coefficient: Log Kow 1.75 (Metalaxyl)

Auto-ignition temperature: Not available.

Decomposition temperature: Not available.

Viscosity: Not applicable.

10. STABILITY AND REACTIVITY

Chemical stability: The product is stable for two years at ambient temperature and pressure, under normal storage and handling conditions. Avoid storage under extreme temperatures and conditions. Store below 50 °C, preferably below 30 °C, and not for prolonged periods in direct sunlight.

Reactivity: No hazardous reactions if stored and handled as indicated.

Possibility of hazardous reactions: Unlikely to occur.

Conditions to avoid: Keep away from extreme heat, sparks and exposure to flames.

Incompatible materials: Strong oxidizers, strong bases, strong reducing agents.

Hazardous decomposition products: Alcohols. Carbon monoxide and carbon dioxide may form under burning conditions or with incomplete combustion.

ECLIPSE ST

SAFETY DATA SHEET

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY:

Calculated according to GHS.

Oral LD₅₀ (24h) >180 000 mg/kg (rat)

Dermal LD₅₀ > 850 000 mg/kg (rat)

Inhalation LC₅₀ (4h) > 1000 mg/ℓ (rat)

Skin Irritation / Corrosion

Eye Damage / Irritation: Not calculated.

Skin Sensitization: May cause an allergic skin reaction.

Respiratory Sensitization: Not calculated.

Reproductive cell mutagenicity: Not calculated.

Carcinogenicity: Not calculated.

Reproductive toxicity: Not calculated.

Specific target organ toxicity – single exposure: Not calculated.

Specific target organ toxicity – repeated exposure: Not calculated.

Aspiration hazard: Not calculated.

Chronic Effects: Not calculated.

POTENTIAL ADVERSE EFFECTS: Harmful if swallowed.

Inhalation: Not calculated.

Ingestion: Not calculated.

12. ECOLOGICAL INFORMATION

This product is expected to be harmful to aquatic life with lasting effect.

ECOTOXICITY DATA:

Metalaxyl

Fish:

LC ₅₀ (96 h)	Rainbow trout	>100 mg/ℓ
	Carp	>100 mg/ℓ
	Bluegill sunfish	>100 mg/ℓ

Daphnia:

EC ₅₀ (48 h)		> 28 mg/ℓ
-------------------------	--	-----------

Birds:

Acute oral LD ₅₀		
(7 d)	Japanese quail	923 mg/kg
(8 d)	Mallard ducks	1470 mg/kg
Dietary LD ₅₀ (8d)	Japanese quail	>10000 mg/kg
	Bobwhite quail	>10000 mg/kg
	Mallard ducks	>10000 mg/kg

Bees:

LD ₅₀ contact		>200 µg/bee
LD ₅₀ oral		269 µg/bee

Algae:

LC ₅₀ (120 h)	<i>Scenedesmus subspicatus</i>	33 mg/ℓ
--------------------------	--------------------------------	---------

Worms:

LC ₅₀	<i>Eisenia fetida</i>	>1000 mg/kg
------------------	-----------------------	-------------

Other aquatic:

spp. EC ₅₀ (96 h)	Mysid shrimps	25 mg/ℓ
	Eastern oysters	4.6 mg/ℓ

ENVIRONMENTAL EFFECTS

Based on information for the active ingredient:

Metalaxyl

Animals: In mammals, following oral administration, metalaxyl is rapidly absorbed and also rapidly and almost completely eliminated with urine and faeces. Metabolism proceeds via hydrolysis of the ester bond, oxidation of the 2-(6)-methyl group and hydroxylation of the phenyl ring and N-dealkylation. There was no evidence for accumulation or retention of metalaxyl or its metabolites.

Plants: Metalaxyl is metabolised by more than four types of phase I reaction to form major metabolites; at phase II, most of the metabolites are conjugated with sugar. The types of reaction in phase I are: oxidation of the phenyl ring, oxidation of the methyl group, cleavage of the methyl ester and N-dealkylation.

Persistence and degradability: In soil, DT₅₀ 29 d (realistic range 10–40 d), Koc 70 ml/g (realistic range 30–300 ml/g). DT₅₀ in water 22–48 d. Photolytically stable in water and on soil surfaces.

Bio-accumulative potential: No evidence for accumulation.

Mobility in soil: Metalaxyl poses a threat of contamination of ground water.

Other adverse effects: Not determined.

13. DISPOSAL CONSIDERATIONS

Waste: Open dumping or burning of this pesticide is prohibited. Waste resulting from the use of this product cannot be reused or re-processed. Never pour untreated waste or surplus product into public sewers or where there is any danger of run-off or seepage into water systems. Do not contaminate rivers, dams or any other water sources with the product or used containers. Comply with local legislation applying to waste disposal. The product may be taken to a registered waste disposal site or incineration plant.

Container:

ECLIPSE ST

SAFETY DATA SHEET

Plastic bag: Turn the bag inside out. Hold the bag over the spray or mixing tank and rinse the bag with running water for thirty seconds. Shake the rinsate off into the tank. Repeat the rinsing twice. Cut the bag into pieces and dispose of via an approved collector or recycler www.croplife.co.za. Do not bury, burn, or donate the container to any other parties that may use it as a container for foodstuffs.

14. TRANSPORT INFORMATION

UN Number: Not regulated.

Special / Environmental Precautions: Wedge drums tightly to avoid movement.

Transport in bulk: Refer to MARPOL 73/78, Annex II and the IBC code.

15. REGULATORY INFORMATION

Safety, health and environmental regulations / legislation for the mixture:

OHSA 1993 Regulations for Hazardous Chemical Substances.

Relevant information regarding restrictions: None.

EU regulation: Regulation EC1272/2008 (EU-GHS/CLP)

Other national regulations: None.

Chemical Safety Assessment carried out? No

16. OTHER INFORMATION

Packaging: Packed in 30 g, 50 g, 100 g, 200 g, 500 g, 570 g, 1 kg, 5 kilograms bags labelled according to South African regulations and guidelines.

Other hazard statements, abbreviations and explanations:

H302: Harmful if swallowed.

IATA: International Air Transport Association.

IBC: International Bulk Chemical.

ICAO: International Civil Aviation Organization.

IMDG: International Maritime Dangerous Goods

IMO: International Maritime Organization.

LD₅₀ value: The median lethal dose or the amount of a toxic agent that is sufficient to kill 50 percent of a population within a certain period of time.

OEL/RL: Occupational exposure limit-recommended limit.

TWA: Time-weighted average – The average exposure over a specified period, usually a nominal eight hours.

ST/STEL: Short-term exposure limits.

Disclaimer: The information on this sheet is not a specification; it does not guarantee specific properties. The information is intended to provide general guidance as to health and safety based upon our knowledge of the handling, storage and use of the product. It is not applicable to unusual or non-standard uses of the product nor where instructions or recommendations are not followed. All information is given in good faith but without guarantee in respect of accuracy, and no responsibility is accepted for errors and omissions or the consequence thereof.

END OF DOCUMENT

Compiled: May 2010

Reviewed: September 2022

Revision no.: (3)

Next revision: September 2027

For detailed information on revisions, contact the Registration holder.