

## Safety Data Sheet

### ECLIPSE ST L 7321 (Act 36 of 1947)

Date of issue: 21/05/2010

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<b>1) PRODUCT AND COMPANY IDENTIFICATION</b>	
<b>Product name:</b>	ECLIPSE ST
<b>Other means of identification:</b>	Metalaxyl 350 g/kg WS
<b>Recommended use:</b>	Fungicide seed treatment
<b>Restrictions on use:</b>	Agriculture
<b>UN No:</b>	Not Regulated
<b>Distributed by:</b>	MERIDIAN AGRITECH P O BOX 436 MODDERFONTEIN TEL 011 8228509 FAX 0866901386 MOBILE: 0834006056 www.agritech.co.za
<b>Emergency Number:</b>	POISON CENTRE (UNITAS HOSPITAL) 012 664 1100 TYGERBERG:021 931 6129 RED CROSS: 021 689 5227 RAPID SPILL RESPONSE 0800 775 3305 GRIFFON POISON CENTRE: 082 446 8946
<b>Chemical Name:</b>	methyl <i>N</i> -(methoxyacetyl)- <i>N</i> -(2,6-xylyl)-DL-alaninate;
<b>2) Hazards Identification:</b>	
<b>Product Classification:</b>	R22 Full text of phrases; see section 15
<b>Label Elements:</b>	N/A
<b>Health effects: eyes:</b>	May cause slight irritation.
<b>Health effects: skin:</b>	May cause slight transient irritation.
<b>Health effects: ingestion</b>	May cause irritation and could be harmful if swallowed.
<b>Health effects: inhalation</b>	Not harmful under normal conditions.
<b>3) Composition Details:</b>	
<b>COMPOSITION</b>	Metalaxyl
	350 g/kg
<b>4) First Aid Measures:</b>	
<b>Inhalation:</b>	Remove patient to fresh air should irritation occur. Seek medical assistance should irritation persist.
<b>Skin contact:</b>	Remove contaminated clothing and footwear. Wash affected areas with soap and water. Seek medical assistance should irritation persist.
<b>Eye contact:</b>	Flush eyes with water for 15 minutes. Seek medical assistance should irritation persist.
<b>Ingestion</b>	

<b>Advice to physician:</b>	Seek medical assistance if large amount is ingested or if feeling ill. For advice, contact the National Poisons Centre  Treat symptomatically.
<b>5) Fire-Fighting Measures:</b>	
<b>Flash point:</b>  <b>Extinguishing Media:</b>  <b>Fire Fighting:</b>     <b>Protective clothing:</b>	- Carbon dioxide, foam or dry chemical.  Remove spectators from surrounding area. Isolate the fire area and evacuate downwind. Use a recommended extinguishing agent for the type of surrounding fire. Fight fire from maximum distance and use unmanned hose holder or monitor nozzles. Contain fire control agents for later disposal. Avoid inhaling hazardous vapours and fumes from burning materials. Keep upwind. Remove container from fire area if possible and without risk. Containers can burst from excessive heat. Water can be used to cool unaffected containers but must be contained for later disposal. Avoid pollution of waterways. Generating poisonous and corrosive fumes containing: oxides of carbon and nitrogen.  Full protective clothing and self-contained breathing apparatus if ventilation is inadequate.
<b>6) Accidental Release Measures:</b>	
<b>Personal precautions:</b>   <b>Environmental precautions:</b>   <b>Occupational spill:</b>	Avoid contact with skin and eyes. Do not breathe in spray or fumes. For personal protection see Section 8.  Do not contaminate waterways, drains and groundwater. If contamination of waterways, drains, rivers or lakes is unavoidable, warn the local authorities (Police and Department of Water/Environmental affairs) immediately.  Wear protective clothing. Clear area of unprotected personnel. Contain and absorb liquid spills with inert material and place in waste containers. If spill does enter waterways contact the local authority. Collect in an appropriate sealable container for disposal in an approved landfill. Wash area with water and detergent and absorb with further inert material.
<b>7) Handling &amp; Storage:</b>	
<b>Handling:</b>         <b>Storage:</b>	Avoid skin and eye contact and inhalation of spray mist. APPROVED HANDLER: This product must be under the control of an approved handler when applied in a wide dispersive manner; or used by a commercial contractor. Spills may be slippery and should be cleaned up immediately. TRACKING: Is not required BEWARE: Spray drift hazard. Apply this product carefully. Spray drift may cause serious damage to other desirable plants.  Store in original container tightly closed and in a locked, dry, cool area away from foodstuffs, fertilisers and seeds. Keep away from children or uninformed persons.
<b>8) Exposure Control / Personal Protection:</b>	

<p>It is essential to provide adequate ventilation. The measures appropriate for a particular work site depend on how this material is used and on the extent of exposure. Ensure that control systems are properly designed and maintained. Comply with occupational safety, environmental, fire, and other applicable regulations.</p> <p><b>Occupational Exposure Limits:</b></p> <p><b>Engineering Controls:</b></p> <p><b><u>PERSONAL PROTECTIVE EQUIPMENT:</u></b></p> <p><b>Clothing:</b></p> <p><b>Gloves:</b></p> <p><b>Eye protection:</b></p> <p><b>Emergency eye wash:</b></p>	<p>8h TWA – 10mg/m<sup>3</sup></p> <p>Containment and/or segregation is the most reliable technical protection measure if exposure cannot be eliminated. If airborne mists or vapours are generated, use local exhaust ventilation controls. Assess exposure and use any additional measures to keep airborne levels below any relevant exposure limit. Where necessary, seek additional occupational hygiene advice.</p> <p>Employee must wear appropriate protective (impervious) clothing and equipment to prevent repeated or prolonged skin contact with this substance. Hygiene measures: Wash hands before breaks and immediately after handling the product. When using, do not eat, drink or smoke. Wash contaminated clothing and equipment before re-use.</p> <p>Employee must wear appropriate chemical-resistant gloves to prevent contact with this substance</p> <p>The use of safety goggles is recommended.</p> <p>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.</p>
<b>9) Physical &amp; Chemical Properties:</b>	
<b>Form:</b>	Solid granule
<b>Colour:</b>	Beige
<b>Odour:</b>	Characteristic
<b>Solubility:</b>	Water 8.4 g/L (22 °C).
<b>pH:</b>	6.5 - 8.5
<b>Odour threshold:</b>	Not available
<b>Melting point / Freezing point</b>	63.5 – 72.3°C (Metalaxyl)
<b>Initial boiling point and boiling range</b>	295.9°C/757 mmHg (Metalaxyl)
<b>Flash point:</b>	Not available
<b>Evaporation rate:</b>	Not available
<b>Flammability (solid, gas)</b>	Not available
<b>Upper/ lower flammability or explosive limits:</b>	Not available
<b>Vapour pressure:</b>	0.75 mPa @ 25°C (Metalaxyl)
<b>Vapour density:</b>	Not available
<b>Relative density:</b>	Not available
<b>Partition coefficient: n-octanol/water</b>	Log K <sub>ow</sub> 1.75 (Metalaxyl)
<b>Auto-ignition temperature:</b>	Not available
<b>Viscosity:</b>	Not applicable
<b>10) Stability &amp; Reactivity:</b>	
<b>Stability:</b>	When stored appropriately this product should show no significant degradation for 2 years from the date of manufacture.
<b>Conditions to avoid:</b>	Avoid extreme heat.
<b>Incompatible materials:</b>	None known
<b>Hazardous decomposition product(s):</b>	None known
<b>11) Toxicological Information:</b>	

Acute :Oral LD<sub>50</sub> : > 650 mg/kg, rat.  
Dermal LD<sub>50</sub> : >3000 mg/kg, rat.  
Inhalation LD<sub>50</sub> : (4h) >3500 mg/m<sup>3</sup>, rat.

Skin irritation : Not an irritant, rabbits.

Eye irritation : Slight irritant, rabbits.

Sensitisation : Animal test did not cause sensitization by skin contact, guinea pig. No records of human poisoning. Symptoms in animals are non specific.

## 12) Ecological Information:

Bees LD<sub>50</sub> : (contact) > 200 µg/bee, (oral) > 260 µg/bee. Not toxic to bees.  
Birds LD<sub>50</sub> : (7d) > 900 mg/kg Japanese quail, (8d) > 1400 mg/kg Mallard ducks.  
LC<sub>50</sub> : (8d) Japanese quail, Bobwhite quail & Mallard ducks >10 000 mg/kg.  
Fish LD<sub>50</sub> : (96h) > 100 mg/L Rainbow trout & Bluegill sunfish.

Daphnia LD<sub>50</sub>: (48h) > 25 mg/L.

Worms L<sub>50</sub> : (14d) > 1000 mg/kg soil, Eisenia foetida.

Metalaxyl is practically non toxic to birds, aquatic organisms and bees.

Persistence and bioaccumulation:

In soil, DT<sub>50</sub> 29 d (realistic range 10–40 d), K<sub>oc</sub> 70 ml/g (realistic range 30–300 ml/g). DT<sub>50</sub> in water 22–48 d. Photolytically stable in water and on soil surfaces.

## 13) Disposal Considerations:

**Waste Disposal** : Do not contaminate water, food or feed by disposal. Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

**Container Disposal** : Refer to the product label for instructions.

Container Refilling and Disposal:

If the container is to be refilled, do not rinse with any material or introduce any pesticide other than this product.

**DO NO REUSE THE CONTAINER FOR ANY OTHER PURPOSE.**

Do not transport if this container is damaged or leaking.

## 14) Transportation Information:

UN Number: None allocated

Dangerous Goods Class: None Allocated

Hazchem Code: None Allocated

## 15) Regulatory Information:

Poison schedule - S5: Substances and preparations that:

- Have low toxicity or a low concentration
- Have a low to moderate hazard
- Can cause only minor adverse effects to human being in normal use
- Require caution in handling, storage, or use

**Risk phrases:**

**R22** Harmful if swallowed

**Safety phrases:**

**S20** Do not eat or drink when using.

## 16) Other Information:

All information and instructions provided in this Safety Data Sheet (SDS) are based on the current state of scientific and technical knowledge at the date indicated on the present SDS and are presented in good faith and believed to be correct. This information applies to the product as such. In case of new formulations or mixes, it is necessary to ascertain that a new danger will not appear.

It is the responsibility of persons in receipt of this SDS to ensure that the information contained herein is properly read and understood by all people who may use, handle, dispose or in any way come in contact with this product. If the recipient subsequently produces formulation(s) containing this product, it is the recipient's sole responsibility to ensure the transfer of all relevant information from this SDS to their own SDS.

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