


Safety Data Sheet

EPIC 125 SC L7963 (Act 36 of 1947)

1) PRODUCT AND COMPANY IDENTIFICATION	
Product name:	EPIC 125 SC
Other means of identification:	Epoxiconazole 125 g/L SC
Chemical Name:	Epoxiconazole: 2RS,3SR)-1-[3-(2- chlorophenyl)-2,3-epoxy2-(4- fluorophenyl)propyl]-1H-1,2,4-triazole
Recommended use:	Fungicide
Restrictions on use:	Agriculture
UN No:	3082
Distributed by:	MERIDIAN AGRITECH P O BOX 436 MODDERFONTEIN TEL 011 8228509 FAX 011 8223494 MOBILE: 0834006056 www.agritech.co.za
Emergency Number:	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.
2) Hazards Identification:	
Classification of the product is based on the co-formulants listed in section 3	Acute Toxicity (Oral) Category 4 Acute Toxicity (Dermal) Category 4 Acute Toxicity (Inhalation) Category 3 Skin Sensitization Category 1 Carcinogenicity Category 1B Reproductive Category 1B Aquatic Chronic Category 2
Label Elements	<p>Hazard symbols: Xn – Harmful N – Dangerous for the environmental</p> <div style="text-align: center;">  </div> <p>Signal word: Danger</p> <p>Hazard Statements: H301: Toxic if swallowed. H311: Toxic in contact with skin. H314: Causes severe skin burns and eye damage. H317: May cause an allergic skin reaction. H331: Toxic if inhaled. H341: Suspected of causing genetic defects. H350: May cause cancer. H351: Suspected of causing cancer. H360FD: May damage fertility or the unborn child. H411: Toxic to aquatic life with long-lasting effects.</p> <p>Precautionary Statements: P201: Obtain special instructions before use.</p>

	<p>P202: Do not handle until all safety precautions have been read and understood.</p> <p>P260: Do not breathe mist/fumes/vapours/spray.</p> <p>P262: Do not get in eyes, on skin, or on clothing.</p> <p>P263: Avoid contact during pregnancy or while nursing.</p> <p>P270: Do not eat, drink or smoke when using the product.</p> <p>P271: Use only outdoors or in a well-ventilated area.</p> <p>P272: Contaminated work clothing should not be allowed out of the workplace.</p> <p>P273: Avoid release to the environment.</p> <p>P280: Wear protective gloves, protective clothing, eye protection.</p> <p>P321: Specific treatment (See First aid measures on this label)</p> <p>P362+P364: Take off contaminated clothing and wash it before reuse.</p> <p>P405: Store locked up.</p> <p>Symbol(s): N – Dangerous for the environment Xn – Harmful. Xi - Irritant</p> <p>R-phrases(s): R40: Possible risk of irreversible effects. R51: Toxic to aquatic organisms. R53: May cause long-term adverse effects in the aquatic environment. R62: Possible risk of impaired fertility. R63: Possible risk of harm to the unborn child.</p> <p>S-phrases(s): S2: Keep out of reach of children. S13: Keep away from food, drink and animal feeding stuffs. S36/37: Wear suitable protective clothing and gloves. S46: If swallowed, seek medical advice immediately and show this container or label. S53: Avoid exposure – obtain special instructions before use. S60: This material and its container must be disposed of as hazardous waste. S61: Avoid release to the environment.</p>
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3) COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Substances:

Not applicable

3.2 Mixtures:

Chemical name	Concentration	CAS No.	EC No.	Classification according to Regulation EC 1272/2008 (CLP)
Epoxiconazole	125 g/L	133855-98-8	406-850-2	Carc. 2 (H351) Aquatic Chronic 2 (H411) Repr. 1B (H360Df)
Formaldehyde	0.1%	50-00-0	200-001-8	Acute Tox. Cat. 3 (H301) Acute Tox. Cat. 3 (H311) Skin Corr. Cat. 1B (H314) Skin Sens. Cat. 1 (H317) Acute Tox. Cat. 3 (H331) Muta. Cat. 2 (H341) Carc. Cat. 1B (H350)

4) FIRST AID MEASURES

Description of First-Aid Measures:

Inhalation:

Remove patient to fresh air. Loosen clothing around neck. Lie down and keep warm and rested. If breathing is shallow or has stopped ensure airway is clear and apply resuscitation. Seek medical assistance if symptoms develop or persist.

Skin contact:

<p>Eye contact:</p> <p>Ingestion</p> <p>Most important symptoms and effects, both acute and delayed:</p> <p>Indication of any immediate medical attention and special treatment needed:</p>	<p>Immediately remove contaminated clothing and wash affected areas thoroughly with soap and water. Wash contaminated clothing before re-use. Seek medical assistance if irritation persists.</p> <p>Flush eyes with plenty of water for at least 15 minutes holding eyelids open. Remove contact lenses. Seek medical assistance immediately.</p> <p>Never give anything by mouth to an unconscious person. For advice, contact the National Poisons Centre. Do not induce vomiting. If safe to do so, rinse patients mouth and get the patient to drink plenty of water. Seek medical assistance immediately.</p> <p>The product may cause mild to moderate irritation, tearing, nausea, vomiting, diarrhoea, headache, breathing difficulty and death. Ingestion may resemble alcohol intoxication, progressing to central nervous system depression, vomiting, headache, rapid respiratory and heart rate, lowered blood pressure, stupor, collapse, and unconsciousness with convulsions. Death from respiratory arrest or cardiovascular collapse may follow.</p> <p>Treat symptomatically after decontamination. If vomiting occurs, solvent and surfactants present may cause pulmonary pneumonitis.</p>
5) FIRE-FIGHTING MEASURES	
<p>Extinguishing Media:</p> <p>Unsuitable Extinguishing Media:</p> <p>Specific Hazards arising from the substance/mixture:</p> <p>Fire Fighting:</p> <p>Protective clothing:</p>	<p>If involved in a fire, the product will not burn. Choose extinguishing media to suit the burning material.</p> <p>Do not use high volume water jet, due to contamination risk.</p> <p>If involved in a fire, the dehydrated components may emit oxides of carbon, oxides of nitrogen, hydrogen chloride and hydrogen fluoride.</p> <p>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.</p> <p>Avoid inhaling hazardous vapours and fumes from burning materials. Keep upwind. Remove container from fire area if possible and without risk. Water can be used to cool unaffected containers but must be contained for later disposal. Do not scatter the material. Bund area with sand or earth to avoid pollution of waterways. Water can be used to cool containers. Dispose of extinguishing agent and spillage in a safe way at a later stage.</p> <p>Full protective clothing and self-contained breathing apparatus</p>
6) ACCIDENTAL RELEASE MEASURES	
<p>Personal precautions, protective equipment and emergency procedures:</p> <p>Environmental precautions:</p> <p>Methods and material for containment and cleaning up:</p>	<p>Avoid contact with skin and eyes. For personal protection see Section 8.</p> <p>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</p> <p>Do not eat, drink or smoke during the clean up process. Clear area of unprotected personnel. Wear protective gear: Keep people and animals away. Reposition leaking containers to minimize further leakage. Contain spill absorb with clay, sand, soil or proprietary absorbent (such as vermiculite). Collect the spilled material and waste in sealable open-top type containers for disposal. Prevent from entering drains, waterways or sewers. Use</p>

	earthen bunds or absorbent bunding to prevent spreading of spillage.										
	Deal with spillages immediately. If contamination of drains, streams, watercourses etc. is unavoidable, then warn the local authorities.										
7) HANDLING & STORAGE											
Precautions for Safe Handling:	Do NOT contaminate dams, rivers or streams, or any other water bodies with chemical or used containers.										
Conditions for Safe Storage, including any incompatibilities:	Store in original container tightly closed and in a locked, dry, cool, well ventilated out of direct sunlight. Keep away from children or uninformed persons. DO NOT store in direct sunlight for prolonged periods. Keep away from strong oxidising agents. Keep out of reach of children.										
8) EXPOSURE CONTROL / PERSONAL PROTECTION											
Appropriate Engineering Controls:	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.										
Control Parameters: Occupational exposure limits:	<table><tr><td>Ingredient</td><td>CAS#</td><td>Limit</td><td>Basis</td></tr><tr><td>Formaldehyde gas</td><td>50-00-0</td><td>STEL: 0.3 ppm</td><td>ACGIH (TLV) [United States]</td></tr></table>			Ingredient	CAS#	Limit	Basis	Formaldehyde gas	50-00-0	STEL: 0.3 ppm	ACGIH (TLV) [United States]
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Formaldehyde gas	50-00-0	STEL: 0.3 ppm	ACGIH (TLV) [United States]								
PERSONAL PROTECTIVE EQUIPMENT:											
Clothing:	Consult supplier to confirm that the equipment is suitable.										
Respiratory protection:	When opening the container, preparing the spray and using the prepared spray wear protective waterproof clothing, water resistant. Re-entry period: Do not enter treated area until spray has dried.										
Gloves:	Full-facepiece respirator (or goggles and half facepiece respirator). Handle in well ventilated areas, generally natural ventilation is adequate.										
Eye protection:	Elbow length PVC gloves.										
Emergency eye wash:	Safety goggles.										
	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 & CHEMICAL PROPERTIES											
Form:	Liquid										
Colour:	Light brown										
Odour:	Characteristic odour										
Solubility:	Suspends in water										
pH:	7 - 8										
Odour threshold:	Not available										
Melting point / Freezing point:	Not available										
Initial boiling point and boiling range	Not available										
Flash point:	Not available										
Evaporation rate:	Not available										
Flammability (solid, gas)	Not available										
Upper/ lower flammability or explosive limits:	Not available										
Vapour pressure:	<0.01 mPa (20°C)										
Vapour density:	Not available										
Relative density:	1.02 – 1.08										
Partition coefficient: n-octanol/water	Not available										
Auto-ignition temperature:	Not available										

Decomposition Temperature:	Not available
Viscosity:	Not available
10) STABILITY & REACTIVITY	
Reactivity:	No hazardous reactions if stored and handled as indicated.
Chemical Stability:	When stored appropriately this product should show no significant degradation for 2 years from the date of manufacture.
Possibility of hazardous reactions:	None known.
Conditions to avoid:	Avoid extreme temperatures.
Incompatible materials:	Strong oxidizing agents and bases.
Hazardous decomposition product(s):	If involved in a fire, the dehydrated components may emit oxides of carbon, oxides of nitrogen, hydrogen chloride and hydrogen fluoride.
11) TOXICOLOGICAL INFORMATION	
Acute Toxicity:	
Oral:	LD50 (rat) >2200 mg/kg.
Dermal:	LD50 (rat) >2000 mg/kg.
Inhalation:	LC50 (rat) (4hr) >3.26 mg/l.
Skin Corrosion/Irritation:	Mild skin irritant.
Serious Eye Damage/Irritation:	Mild eye irritant.
Respiratory or Skin Sensitization:	Product is not a skin sensitizer.
Germ Cell Mutagenicity:	No data available.
Carcinogenicity:	Suspected of causing cancer.
Reproductive Toxicity:	May damage fertility or the unborn child.
STOT-SE:	No data available.
STOT-RE:	No data available.
Aspiration Hazard:	No data available.
12) ECOLOGICAL INFORMATION	
Ecotoxicity: Fludioxonil	
Birds:	LD50 for quail is >2000 mg/kg.
Fish:	LC50 (96 hr) for trout is 2.2 - 4.6 mg/kg and for bluegill sunfish 4.6 - 6.8 mg/kg.
Daphnia:	LC50 (48 hr) for daphnia is 8.7 mg/l.
Algae:	EC50 (72 hr) for green algae is 2.3 mg/l.
Worms:	EC50 (14 d) > 1000 mg/kg soil.
Bees:	LD50 > 100 µg/bee (oral and contact).
Persistence and Degradability:	Degradation in soil is by microbial activity, DT50 c. 2-3 mo. Koc 957-2647.
Bio-accumulative Potential:	No data available.
Mobility in Soil:	No data available.
13) DISPOSAL CONSIDERATIONS	
Waste Disposal:	In accordance with local and national regulations. Must be incinerated in a suitable incineration plant holding a permit delivered by the competent authorities. Do not contaminate water, food or feed by disposal. Wastes resulting from the use of this product may be disposed of at an approved chemicals waste disposal facility.
Container Disposal:	Triple or pressure rinse containers before disposal. Do not dispose of undiluted chemical on-site. If recycling, close container and return clean containers to recycler or designated collection point. If not recycling, break, crush or puncture and bury empty containers in a local authority landfill. If no landfill is available, bury containers below 500mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation or tree roots. Empty containers and product should not be burnt. Dispose of waste product at a reputable waste disposal contractor.
14) TRANSPORTATION INFORMATION	
Road Transport ADR / IRD:	UN NUMBER: 3082 UN Proper Shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Epoxiconazole) Transport Hazard Class: 9 Miscellaneous Dangerous Goods Packaging group: III

	Labelling no: 9 Environmental Hazards: Not applicable Special Precautions for User: Read safety instructions, SDS and emergency procedures before handling.
Maritime Transport IMDG / IMO:	UN NUMBER: 3082 UN Proper Shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Epoxiconazole) Transport Hazard Class: 9 Miscellaneous Dangerous Goods Packaging group: III Labelling no: 9 Environmental Hazards: Marine Pollutant Special Precautions for User: Read safety instructions, SDS and emergency procedures before handling. 
Air Transport ICAO / IATA:	UN NUMBER: 3082 UN Proper Shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Epoxiconazole) Transport Hazard Class: 9 Miscellaneous Dangerous Goods Packaging group: III Labelling no: 9 Environmental Hazards: Not applicable Special Precautions for User: Read safety instructions, SDS and emergency procedures before handling.
Transport in Bulk (according to Annex II of MARPOL 73/78 and the IBC Code):	No transport in bulk according to the IBC Code.
15) REGULATORY INFORMATION	
Safety, health and environmental regulations/legislation specific for the substance/mixture:	For the user of this plant-protective product applies: 'To avoid risks to man and the environment, comply with the instructions for use.' (Directive 1999/45/EC, Article 10, No. 1.2)
Chemical Safety Assessment:	Advice on product handling can be found in sections 7 and 8 of this safety data sheet.
16) OTHER INFORMATION	
<p>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.</p> <p>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.</p> <p>The information contained herein is provided in good faith but makes no representation as to its comprehensiveness or accuracy. A properly trained person using this product intends this document only as a guide to the appropriate handling of the material. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose.</p> <p>MERIDIAN AGRITECH MAKES NO REPRESENTATION OR WARRANTIES, EITHER EXPRESSES OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY WARRANTIES OF MERCHANT ABILITY, FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THE INFORMATION SET FORTH HEREIN OR THE PRODUCT TO WHICH THE INFORMATION REFERS. ACCORDINGLY, MERIDIAN AGRITECH (PTY) LTD WILL NOT BE RESPONSIBLE FOR DAMAGES RESULTING FROM USE OF OR RELIANCE UPON THIS INFORMATION.</p> <p>Date of issue: 08/02/2006 Date of revision: 22/04/2016, 08/01/2021</p> <p>Abbreviations and acronyms:</p> <ol style="list-style-type: none"> 1. CAS number: Chemical Abstracts Service number. 2. CLP: Classification, Labelling, Packaging. 3. LD₅₀: Lethal Dose for 50% of the test population. 4. LC₅₀: Lethal Concentration for 50% of the test population. 5. DT₅₀: Half-life. 6. GHS: Globally Harmonised System (of Classification and Labelling of Chemicals). 	

7. STOT: Specific Target Organ Toxicity
8. SE: Single exposure
9. RE: Repeated exposure
10. STEL: Short-term exposure limit
11. Ppm: parts per million
12. ACGIH: American Conference of Governmental Industrial Hygienists
13. TLV: Threshold limit value

Literature References:

- GHS: www.ccohs.ca/oshanswers/chemicals/ghs.html
- ECHA: <https://echa.europa.eu/search-chemicals>