


Safety Data Sheet

EPIC Xtra- Reg. No: L 10085 (Act No 36 of 1947)

1) PRODUCT AND COMPANY IDENTIFICATION	
Product name:	EPIC Xtra
Other means of identification:	Epoxiconazole 125 g/L + Carbendazim 125 g/L SC
Chemical Name:	Epoxiconazole: (2 <i>RS</i> ,3 <i>SR</i>)-1-[3-(2-chlorophenyl)-2,3-epoxy-2-(4-fluorophenyl)propyl]-1 <i>H</i> -1,2,4-triazole Carbendazim: methyl benzimidazol-2-ylcarbamate (IUPAC)
Recommended use:	Fungicide
Restrictions on use:	Agriculture
UN No:	3082
Distributed by:	MERIDIAN AGRITECH P O BOX 436 MODDERFONTEIN TEL 011 8228509 FAX 0866901386 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 substance/mixture:	Acute Toxicity (Oral) Category 4 Carcinogenicity Category 2 Mutagenicity Category 1B Reproductive Toxicity Category 1B Aquatic Acute Category 1 Aquatic Chronic Category 1
Label Elements: Globally Harmonized System, EU (GHS):	<p>Pictograms:</p>  <p>Signal Word: Danger</p> <p>Hazard Statements: H302: Harmful if swallowed. H340: May cause genetic defects. H351: Suspected of causing cancer. H360Df: Suspected of damaging the unborn child. H400: Very toxic to aquatic life. H410: Very toxic to aquatic life with long-lasting effects. H411: Toxic to aquatic life with long-lasting effects.</p> <p>Precautionary Statements: P201: Obtain special instructions before use. P202: Do not handle until all safety precautions have been read and understood. P262: Do not get in eyes, on skin, or on clothing. P263: Avoid contact during pregnancy or while nursing. P270: Do not eat, drink or smoke when using the product. P272: Contaminated work clothing should not be allowed</p>

According to Directive 67/548/EEC No. 1272/2008 [CLP]

out of the workplace.
P273: Avoid release to the environment.
P280: Wear protective gloves, protective clothing, eye protection.
P321: Specific treatment (See First aid measures on this label)
P362+P364: Take off contaminated clothing and wash it before reuse.
P405: Store locked up.

Hazard Symbol(s):

Xn – Harmful
N – Dangerous for the environment

R-phrases(s):

R40: Limited evidence of carcinogenic effect.
R46: May cause hereditary genetic damage.
R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R60: May impair fertility.
R61: May cause harm to the unborn child.
R62: Possible risk of impaired fertility.
R63: Possible risk of harm to the unborn child.

S-phrases(s):

S2: Keep out of the reach of children.
S36/37: Wear suitable protective clothing and gloves.
S45: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
S46: If swallowed, seek medical advice immediately and show this container or label.
S60: This material and its container must be disposed of as hazardous waste.
S60: This container and its contents must be disposed of as hazardous waste.
S61: Avoid release to the environment. Refer to special instructions/Safety datasheets

3) COMPOSITION / INFORMATION ON INGREDIENTS:

3.1 Substances:

Not applicable

3.2 Mixtures:

Chemical name	Composition	CAS No.	EC No.	Classification according to Regulation EC 1272/2008 (CLP)
Epoxiconazole	125 g/L	133855-98-8	406-850-2	Carc. Cat 2 (H351) Repr Cat 1B (H360Df) Aquatic Chronic Cat 2 (H411)
Carbendazim	125 g/L	10605-21-7	234-232-0	Mut. Cat 1B (H340) Repr. Cat 1B (H360FD) Aquatic Acute Cat 1 (H400) Aquatic Chronic 1 (H410)
Denatonium benzoate in Monoethylene glycol	5%		906-307-4	Acute Tox. Cat. 4 (H302)

4) FIRST AID MEASURES:

Description of First-Aid Measures:

Inhalation:

Remove victim to well ventilated area and loosen clothing around the neck. If breathing is difficult, give oxygen. If breathing has stopped, perform artificial respiration. **Get medical attention immediately.**

Skin contact:

Remove contaminated clothing and thoroughly wash body with soap and water. Seek medical attention if necessary. Wash contaminated clothing before re-use.

Eye contact:

Immediately flush eyes with plenty of water. Remove contact lenses, if worn, and flush eyes with water for at least 15 minutes holding eyelids open. Seek medical assistance if irritation persists.

Ingestion:	If swallowed DO NOT induce vomiting unless advised to do so by a medical practitioner. If vomiting occurs spontaneously, keep airways clear. Immediately rinse mouth with water. Never give anything per mouth to an unconscious person. Seek medical advice immediately.
Most important symptoms and effects, both acute and delayed:	See section 2. Other symptoms not known.
Indication of any immediate medical attention and special treatment needed:	Symptomatic treatment and supportive therapy as indicated, no known specific antidote.
5) FIRE-FIGHTING MEASURES:	
Suitable extinguishing media:	Water spray, foam, carbon dioxide (CO ₂), dry powder. Will not burn readily.
Unsuitable extinguishing media:	Water jet.
Specific Hazards arising from the substance/mixture:	Fire may produce irritating or poisonous vapours, mists or other products of combustion. Do not breathe fumes.
Fire Fighting:	Remove spectators from surrounding area. Use a recommended extinguishing agent. Dike extinguishing media for later disposal, do not allow to reach water systems. Dispose of debris and contaminated extinguishing water according to regulations. Water can be used to cool unaffected containers but must be contained for later disposal. Avoid pollution of waterways.
Protective clothing:	Fire-fighters and others that may be exposed should wear full protective clothing and self-contained breathing apparatus
6) ACCIDENTAL RELEASE MEASURES:	
Personal precautions, protective equipment and emergency procedures:	Do not breathe vapor or spray. Avoid contact with skin, eyes and clothing. Wear personal protective clothing according to operator safety during removal of spillage. Do not eat, drink or smoke during the clean-up process. Clear area of unprotected personnel. Wear protective gear as mentioned in section 8 below.
Environmental precautions:	Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system. Do not allow to enter drains or watercourses. If contamination of water courses is unavoidable, report to the Police and the Department of Water/Environmental Affairs immediately.
Methods and material for containment and cleaning up:	Contain the spill and stop leak provided it is safe to do so. Soak up minor spills with suitable absorbent material such as sand, sawdust, vermiculite, diatomaceous earth, etc. Shovel or sweep absorbed material and collect in a suitable container which can be labelled and sealed for disposal according to local regulations. Clean contaminated areas thoroughly with water containing detergent. For large spills, dike spill area and collect washings to avoid any contamination of surface and ground water, water supplies and drains. Deal with spillages immediately. If contamination of waterways or drains is unavoidable, warn the local authorities immediately. Use absorbent material should be stored in labelled, sealable containers until these can be disposed of according to local regulations.
7) HANDLING & STORAGE:	
Precautions for Safe Handling:	Do not breathe in fumes or spray. Avoid contact with skin, eyes and clothes. Suitable protective equipment should be used as a preventative measure during spraying: gloves, coverall, eye protection, footwear. Do not eat, drink, smoke or apply cosmetics while using. Wash hands thoroughly with soap and water after handling, and before eating, tobacco use, drinking, or using the toilet.

Conditions for Safe Storage, including any incompatibilities:	Store in original container tightly closed and in a locked, dry, well-ventilated area out of direct sunlight and away from foodstuffs, fertilisers and seeds. Keep away from children or uninformed persons. Do not contaminate water, food or feed by storage or disposal.
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:	None known.
<u>PERSONAL PROTECTIVE EQUIPMENT:</u>	
Clothing:	Employee must wear appropriate protective (impervious) clothing and chemical resistant boots to prevent skin contact with this substance.
Gloves:	Employee must wear appropriate chemical-resistant gloves to prevent contact with this substance.
Eye protection:	The use of safety goggles or full-face shield is recommended.
Respiratory protection:	Wear suitable respiratory equipment, especially during spraying, such as a face mask or self-breathing apparatus with a combination filter.
Emergency eye wash:	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:	
Appearance:	White to cream white liquid
Odour:	Characteristic
Solubility:	Suspends in water
pH:	7 - 9
Odour threshold:	No data available
Melting point / Freezing point	No data available
Initial boiling point and boiling range	No data available
Flash point:	No data available
Evaporation rate:	No data available
Flammability (solid, gas)	Not flammable
Upper/ lower flammability or explosive limits:	No data available
Vapour pressure:	No data available
Vapour density:	No data available
Relative density:	1.084 g/ml
Partition coefficient: n-octanol/water	No data available
Auto-ignition temperature:	No data available
Decomposition Temperature:	No data available
Viscosity:	No data available
10) STABILITY & REACTIVITY:	
Reactivity:	Stable under normal storage conditions.
Chemical Stability:	When stored appropriately this product should show no significant degradation for 2 years from the date of manufacture. Thermally and chemically stable.
Possibility of hazardous reactions:	Fires can release vapours that are irritating or toxic.
Conditions to avoid:	Protect from direct sunlight, heat and flames.
Incompatible materials:	Strong bases, strong acids, strong oxidising agents.
Hazardous decomposition product(s):	On decomposition releases carbon monoxide, carbon dioxide and nitrogen oxide.
11) TOXICOLOGICAL INFORMATION:	
Acute Toxicity:	LD50 > 4 000 mg/kg, rat.
Oral:	LD50 > 6 000 mg/kg, rat.

Dermal:	LC50 4h > 5.3 mg/L, rat (Epoxiconazole)
Inhalation:	> 5.6 mg/L, rat (Carbendazim)
Skin Corrosion/Irritation:	Not an irritant, rabbit (Epoxiconazole). Not an irritant, rabbit (Carbendazim).
Serious Eye Damage/Irritation:	Not an irritant, rabbit (Epoxiconazole). Not an irritant, rabbit (Carbendazim).
Respiratory or Skin Sensitization:	Not a skin sensitizer, guinea pigs.
Germ Cell Mutagenicity:	May cause genetic defects (Carbendazim)
Carcinogenicity:	Limited evidence of causing cancer (Epoxiconazole)
Reproductive Toxicity:	May damage fertility or the unborn child (Epoxiconazole, Carbendazim)
STOT-SE:	No data available
STOT-RE:	No data available
Aspiration Hazard:	No data available
12) ECOLOGICAL INFORMATION:	
Ecotoxicity:	
Birds:	Oral LD50 quail > 2000 mg/kg (Epoxiconazole). Oral LD50 quail 5826 – 15595 mg/kg (Carbendazim).
Fish:	LC50 (96h) trout 2.2 – 4.6 mg/kg, bluegill sunfish 4.6 – 6.8 mg/kg (Epoxiconazole). LC50 (96h) carp 0.61, rainbow trout 0.83, bluegill sunfish > 17.25, guppies > 8 mg/L (Carbendazim).
Daphnia:	LC50 (48h) > 8.7 mg/L (Epoxiconazole).
Algae:	EC50 (72h) green algae 2.3 mg/L (Epoxiconazole).
Worms:	EC50 (14d) > 1000 mg/kg soil (Epoxiconazole).
Bees:	Oral LD50 >100 µg/bee (Epoxiconazole). LD50 contact > 50 µg/bee (Carbendazim).
Persistence and Degradability:	Epoxiconazole: degraded by microorganisms, DT50 2 – 3 months, Koc 957 – 2647. Carbendazim: DT50 in soil 8 – 32 days in outdoor conditions, in the environment DT50 6 – 12 months of bare soil, 3 – 6 months on turf and 2 – 25 months in water under aerobic and anaerobic conditions respectively. Mainly decomposed by microorganisms Koc 200 – 250.
Bio-accumulative Potential:	Not available.
Mobility in Soil:	Not available.
13) DISPOSAL CONSIDERATIONS:	
Waste Disposal:	Waste should not be re-used. Do not contaminate water, food or feed by disposal. Open dumping or burning of this pesticide is prohibited. Wastes resulting from the use of this product may be disposed of by incineration or at an approved chemical waste disposal facility. Do not dispose of undiluted chemical on site.
Container Disposal:	Refer to the product label for instructions. Triple rinse empty containers before disposal. Add rinsing to the contents of the spray tank before destroying the container in the prescribed manner. Empty containers should not be burnt, puncture and flatten containers and dispose at a licensed landfill site according to local regulations. If the container is to be refilled, do not rinse with any material or introduce any pesticide other than this product. DO NOT REUSE THE CONTAINER FOR ANY OTHER PURPOSE. If recycling, replace cap and take containers to the designated recycling point. If containers cannot be recycled, they should be disposed of together with the waste chemical according to local regulations.
14) TRANSPORTATION INFORMATION:	
Road Transport ADR / IRD:	UN NUMBER: 3082 UN Proper Shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S (125 g/L Epoxiconazole, 125 g/L Carbendazim) 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 (125 g/L Epoxiconazole, 125 g/L Carbendazim)

	<p>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.</p> 
Air Transport ICAO / IATA:	<p>UN NUMBER: 3082 UN Proper Shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S (125 g/L Epoxiconazole, 125 g/L Carbendazim) 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.</p>
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: 19/03/2015 Date of revision: 25/03/2020</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 <p>Literature References:</p> <ul style="list-style-type: none"> • GHS: www.ccohs.ca/oshanswers/chemicals/ghs.html • ECHA: https://echa.europa.eu/search-chemicals 	