



## Safety Data Sheet

### PARADOX - Reg. No: L 10216 (Act No 36 of 1947) N – AR 1843

Date of issue: 02/02/2017

1) IDENTIFICATION OF THE SUBSTANCE OR MIXTURE AND OF THE SUPPLIER.	
Product name:	PARADOX
Other means of identification Recommended use:	Pyraclostrobin/Epoxiconazole 12.5% SE Fungicide
Restrictions on use:	Agriculture
Distributed by:	MERIDIAN AGRITECH P O BOX 436 MODDERFONTEIN TEL 011 8228509 FAX 0866901386 MOBILE: 0834006056 <a href="http://www.agritech.co.za">www.agritech.co.za</a>
Emergency Number:	POISON CENTRE (UNITAS HOSPITAL) 012 664 1100 WESTERN CAPE POISONS TELEPHONE SERVICE 0861 555 777 RAPID SPILL RESPONSE 0800 775 3305 GRIFFON POISON CENTRE: 082 446 8946
Chemical Name:	Pyraclostrobin: methyl <i>N</i> -{2-[1-(4- chlorophenyl)pyrazol-3yloxymethyl]phenyl}( <i>N</i> methoxy)carbamate Epoxiconazole: (2 <i>RS</i> ,3 <i>SR</i> )-1-[3-(2-chlorophenyl)2,3epoxy-2-(4-fluorophenyl)propyl]-1 <i>H</i> -1,2,4-triazole
2) Classification of the substance / mixture:	
Classification of the product is based on the coformulants listed in section 3.	Xn, N; R22, R23, R37/38, R40, R50/53 R62, R63 Full text of R-phrases: see section 15.
Label elements:	Hazard symbols: Xn – Harmful N – Dangerous for the environment Health Hazard     Signal Word: Harmful
Health effects: eyes:	May cause irritation.
Health effects: skin:	May cause irritation and sensitization by contact.

<b>Health effects: ingestion</b>	Harmful if swallowed, may cause damage to lungs.
<b>Health effects: inhalation</b>	May cause irritation.
<b>Health effects: carcinogenicity and reproduction</b>	Limited evidence of a carcinogenic effect. Possible risk of impaired fertility. Possible risk of harm to the unborn child.

### 3) COMPOSITION / INFORMATION ON INGREDIENTS:

Mixture:

Chemical name	Composition	CAS No.	EC No.	Classification according to Regulation EC 1272/2008 (CLP)	Classification according to 67/548/EEC
Pyraclostrobin	6.25%	175013-18-0	n/a	Acute Tox. 3 (H331) Skin Corr./Irrit. 2 (H315) STOT SE 3 (H335) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)	T, N, R23, R37/38, R50/53
Epoxiconazole	6.25%	133855-98-8	406-850-2	Carc. 2 (H351) Repr. 1B (H360Df) Aquatic Chronic 2 (H411)	N, R40, R51/53 R62, R63; S2, S36/37, S46, S61
Monoethylene Glycol	< 10%	107-21-1	203-473-3	Acute Tox. 4 (H302)	Xn, R22; S2
Acetophenone	< 15%	98-86-2	202-708-7	Acute Tox. 4 (H302) Eye Irrit. 2 (H319) Skin Corr./Irrit. 2 (H315)	Xn, Xi, R22, R36; S2, S26
Solvent naptha	< 40%	64742-94.5	265-198-5	Asp Tox. 1 (H304) Aquatic Chronic 2 (H411)	Xn, R65; S2, S23, S24, S62

Full text of Hazard statements, R- and S-phrases: see section 15.

### 4) First Aid Measures:

<b>Eye contact:</b>	Immediately flush eyes with plenty of water. Remove contact lenses, if worn, and flush eyes with water for at least 20 minutes holding eyelids open. Consult an eye specialist.
<b>Skin contact:</b>	Immediately wash thoroughly with soap and water. Seek medical attention. Wash contaminated clothing before re-use.
<b>Ingestion:</b>	If swallowed <b>DO NOT</b> induce vomiting unless advised to do so by a medical practitioner. Immediately rinse mouth thoroughly with water and drink 200 – 300 mL of water. Never give anything via mouth to an unconscious person. <b>Seek medical attention.</b>
<b>Inhalation:</b>	Remove victim to well ventilated area and loosen clothing around the neck. Keep victim warm and at rest. Seek medical attention.
<b>Most important symptoms and effects, acute and delayed:</b>	See section 2 and/or section 11. Additional important symptoms and effects not known.  Symptomatic treatment (decontamination, vital functions) and supportive therapy as indicated, no known specific antidote.

<b>Indication of immediate medical attention and special treatment needed: Advice to physician</b>	
<b>5) Fire-Fighting Measures:</b>	
<b>Suitable extinguishing media:</b>  <b>Unsuitable extinguishing media:</b>	Water spray, foam, carbon dioxide (CO <sub>2</sub> ), dry powder.  Water jet, due to contamination/spreading risk.
<b>Special hazards arising from the substance or mixture:</b>  <b>Fire-fighting:</b>  <b>Protective clothing:</b>	Fires may result in the release of hazardous or irritating vapours such as carbon monoxide, hydrogen chloride, carbon dioxide, nitrogen oxides, hydrogen fluoride, organochloric compounds sulfur oxides.  Remove spectators from surrounding area. Use a recommended extinguishing agent. Fight fire from a maximum distance using unmanned hose holders or monitor nozzles. Remove container from affected area if possible without risk. Dike extinguishing media with sand or earth for later disposal, do not allow to reach water or sewer 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 and ground water.  Fire may produce irritating or poisonous vapours, mists or other products of combustion. Avoid breathing fumes.  Fire-fighters and others that may be exposed should wear full protective clothing and self-contained breathing apparatus.
<b>6) Accidental Release Measures:</b>	
<b>Personal precautions:</b>  <b>Environmental precautions:</b>  <b>Cleaning procedure:</b>	Do not inhale vapour or spray. Avoid contact with skin, eyes and clothing. For personal protection see section 8.  Do not contaminate waterways, drains and groundwater. Do not discharge into the soil/subsoil. If contamination of waterways, drains, rivers or lakes is unavoidable, warn the local authorities (Police and Department of Water/Environmental affairs) immediately.  Do not eat, drink or smoke during the clean-up process. Clear area of unprotected personnel and animals. Wear protective gear and breathing apparatus as mentioned in section 8 below. Contain the spill and stop leak provided it is safe to do so. Soak up minor spills with suitable absorbent, noncombustible material such as sand, sawdust, 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. Do not flush spilled material into drains or waterways. Should spilled product come into contact with water, dike water and dispose of together with spilled material. Clean contaminated areas and equipment thoroughly with water containing detergent and collect washings for disposal. For large spills, dike spill area and pump off product. Collect washings to avoid any contamination of surface and ground water, water supplies and drains. Deal with spillages immediately.  Used absorbent material and washings should be stored in labelled, sealable containers until these can be disposed of



<b>Form:</b> <b>Colour:</b> <b>Odour:</b> <b>Odour threshold:</b> <b>pH:</b> <b>Melting point / Freezing point</b> <b>Initial boiling point and boiling range</b> <b>Flash point:</b> <b>Evaporation rate:</b> <b>Flammability (solid, gas)</b> <b>Upper/ lower flammability or explosive limits:</b> <b>Vapour pressure:</b> <b>Vapour density:</b> <b>Relative density:</b> <b>Solubility(ies)</b> <b>Partition coefficient: n-octanol/water</b> <b>Auto-ignition temperature:</b> <b>Viscosity:</b>	Liquid, suspo-emulsion Off-white Aromatic No data available 2.5 - 5 No data available No data available No data available No data available No data available Not highly flammable No data available No data available No data available 1.01 g/ml Dispersible No data available No data available No data available
<b>10) Stability &amp; Reactivity:</b>	
<b>Reactivity:</b>  <b>Chemical stability:</b>  <b>Hazardous decomposition product(s):</b>  <b>Conditions to avoid:</b>  <b>Incompatible materials:</b>	Stable under normal storage conditions.  When stored appropriately this product should show no significant degradation for 2 years from the date of manufacture.  Fires can release vapours that are irritating or hazardous. On decomposition releases carbon monoxide, carbon dioxide, nitrogen oxides, hydrogen chloride, hydrogen fluoride, organochloric compounds and sulfur oxides.  Protect from extreme temperatures, direct sunlight and heat.  Strong acids, strong bases and oxidising agents.
<b>11) Toxicological Information:</b>	
Acute (calculated): Oral LD50 > 3 000 mg/kg, rat. Dermal LD50 > 3 800 mg/kg, rat and rabbit.  Skin irritation : Irritant, rabbit. Sensitization after skin contact. Eye irritation : Mild irritant, rabbit. Other : Indication of possible carcinogenic effect. : Indication of possible risk to fertility and the unborn child. : Indication of possible developmental toxicity/teratogenicity.	
<b>Information based on active ingredients</b> Inhalation LC50 (4h) > 0.58 mg/L air, rat (Pyraclostrobin) > 5.3 mg/L air, rat (Epoconazole)	
<b>12) Ecological Information:</b>	

**Information below based on active ingredients:**

Bees : LD<sub>50</sub> (oral) > 73.1 µg/bee, (contact) >100 µg/bee (Pyraclostrobin).

: LD<sub>50</sub> > 100 µg/bee (Epoconazole).

Birds : Acute oral LD<sub>50</sub> bobwhite quail > 2000 mg/kg b.w., Dietary LC<sub>50</sub> (5d) for bobwhite quail > 1 176 mg a.s./kg.b.w./d. (Pyraclostrobin).

: Acute oral LD<sub>50</sub> for quail > 2000 mg/kg (Epoconazole).

Fish : LC<sub>50</sub> (96h) rainbow trout 0.006 mg/L (Pyraclostrobin).

: LC<sub>50</sub> (96h) for trout 2.2 – 4.6, bluegill sunfish 4.6 – 6.8 mg/kg (Epoconazole).

Daphnia : EC<sub>50</sub> (48h) 0.016 mg/L (Pyraclostrobin).

: LC<sub>50</sub> (48h) 8.7 mg/L (Epoconazole).

Algae : E<sub>r</sub>C<sub>50</sub> (72h) for *Pseudokirchneriella subcapita* > 0.843 mg/L, E<sub>b</sub>C<sub>50</sub> (72h) for *Pseudokirchneriella subcapita* 0.152 mg/L (Pyraclostrobin).

: EC<sub>50</sub> (72h) for green algae 2.3 mg/L (Epoconazole).

Worms : LC<sub>50</sub> 567 mg/kg soil (Pyraclostrobin).

: EC<sub>50</sub> (14d) > 1000 mg/kg soil (Epoconazole).

Persistence, degradability and motility:

Pyraclostrobin: DT<sub>50</sub> (lab, aerobic, 20 °C) 12–101 d (5 soils); (field) 8–37 d (6 locations). K<sub>oc</sub> 6000–16 000 ml/g.

Epoconazole: Degradation in soil is by microbial activity, DT<sub>50</sub> c. 2–3 mo. K<sub>oc</sub> 957–2647.

Biodegradation: Not available.

Bioaccumulative potential: Not available.

Additional information: Considered a marine pollutant. Do not discharge into the environment without control.

**13) Disposal Considerations:**

**Waste Disposal:** Waste should not be re-used. Do not contaminate rivers, dams, water sources, food or feed by disposal. Open dumping or burning of this pesticide is prohibited. Wastes resulting from the use of this product should be disposed of by a suitable incineration plant according to local regulations.

**Container Disposal:** Refer to the product label for instructions. Triple rinse empty containers before disposal in the following manner: Invert the container over the spray or mixing tank and allow to drain for at least 30 seconds after the flow has slowed to a drip. Thereafter, rinse the container three times with a volume of water equal to a third of that of the container volume. 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 of according to local regulations. Prevent contamination of water sources, food or feed by disposal. **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:**

UN Number: 2902

Road transport ADR/RID

Class: 6.1

Packing group: III

Hazard label: 6.1, EHS

UN proper shipping name: PESTICIDE, LIQUID, TOXIC, N.O.S (contains SOLVENT NAPHTHA, PYRACLOSTROBIN, EPOXICONAZOLE)

Maritime transport IMDG/IMO

Class: 6.1

Packing group: III

Hazard label: 6.1, EHS

Marine pollutant: Yes

UN proper shipping name: PESTICIDE, LIQUID, TOXIC, N.O.S (contains SOLVENT NAPHTHA, PYRACLOSTROBIN, EPOXICONAZOLE)

Air transport IATA/ICAO

Class: 6.1

Packing group: III

Hazard label: 6.1, EHSM

UN proper shipping name: PESTICIDE, LIQUID, TOXIC, N.O.S (contains SOLVENT NAPHTHA, PYRACLOSTROBIN, EPOXICONAZOLE)



## 15) Regulatory Information:

**Symbols:** Xn, N

### Risk – Phrase:

R23 Toxic by inhalation.

R37/38 Irritating to respiratory system and skin.

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R40 Limited evidence of a carcinogenic effect.

R51/53 Toxic to aquatic organisms, 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.

R22 Harmful if swallowed.

R22 Harmful if swallowed.

R36 Irritating to eyes.

R65 Harmful: may cause lung damage if swallowed.

### Safety – Phrase:

S2: Keep out of the reach of children.

S36/37 Wear suitable protective clothing and gloves.

S46 If swallowed, seek medical advice immediately and show the datasheet and container or label. S61: Avoid release to the environment. Refer to special instructions/Safety datasheets.

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S23 Do not breathe vapour or spray.

S24 Avoid contact with skin.

S62 If swallowed, do not induce vomiting: seek medical advice and show this datasheet and label.

### Hazard Statements

H315 Causes skin irritation.

H331 Toxic if inhaled.

H335 May cause respiratory irritation.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long-lasting effects.

H351 Suspected of causing cancer.

H360Df May damage fertility.

H411 Toxic to aquatic life with long-lasting effects.

H302 Harmful if swallowed.

H319 Causes serious eye irritation.

H304 May be fatal if swallowed and enters airways.

## 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. 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

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