growing goodness



MERIDIAN AGROCHEMICAL COMPANY (PTY) LTD P.O. Box 436, Modderfontein, 1645, SOUTH AFRICA Tel +27 11 822 8509 | Fax +27 11 822 3494 | E-mail info@agritech.co.za | www.intelichem.co.za | www.agritech.co.za

REG NO: 2000/010819/07 **VAT NO:** 4120189206

Safety Data Sheet

EXCELION L10666 (Act 36 of 1947)

1) PRODUCT AND COMPANY IDENTIFICATION	
Product name:	EXCELION
Other means of identification:	AE 400 SC
Chemical Name:	Azoxystrobin(IUPAC): methyl (<i>E</i>)-2-{2-[6-(2-cyanophenoxy)pyrimidin-4-yloxy]phenyl}-3-methoxyacrylate <u>Epoxiconazole (IUPAC):</u> (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
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:	
	GHS Oral Category 5 GHS Dermal Category 5 Acute Toxicity (Inhalation) Category 3 Carcinogenicity Category 2 Reproductive Toxicity Category 1B Aquatic Acute Category 1 Aquatic Chronic Category 1
Label Elements: Globally Harmonized System, EU (GHS):	Pictograms: Signal word: Danger
	Hazard Statements: H331: Toxic if inhaled. H351: Suspected of causing cancer. H360: May damage fertility or the unborn child. H361: Suspected of damaging fertility or 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. Precautionary Statements: P201: Obtain special instructions before use. P202: Do not handle until all safety precautions have been read and understood.

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

P260: Do not breathe fumes/vapours/spray.

P263: Avoid contact during pregnancy or while nursing. **P270:** Do not eat, drink or smoke when using the product.

P271: Use only outdoors or in a well-ventilated area.

P272: Contaminated work clothing should not be allowed out of the workplace.

P273: Avoid release to the environment.

P280: Wear protective gloves, protective clothing, eye

protection.

P284: In case of inadequate ventilation wear respiratory

protection.

P321: Specific treatment (See First aid measures on this

label)

P405: Store locked up.

Hazard symbols:

N – Dangerous for the environment

Xn – Harmful

Xi - Irritant

T - Toxic to aquatic organisms

R-phrase(s):

R23: Toxic by inhalation.

R45: May cause cancer.

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.

S-phrase(s):

\$1/2: Keep locked up and out of reach of children.

\$13: Keep away from food, drink and animal feeding stuffs.

\$23: Do not breathe vapour/spray.

\$24/25: Avoid contact with the skin and eyes.

\$36: Wear suitable protective clothing.

\$38: In case of insufficient ventilation, wear suitable

respiratory equipment.

S51: Use only in well-ventilated areas.

S61: Avoid release to the environment. Refer to special

instructions/safety data sheets.

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)
Azoxystrobin	200 g/L	131860-33-8	603-524-3	Acute Tox Cat 3 (H331) Aquatic Acute Cat 1 (H400) Aquatic Chronic Cat 1 (H410)
Epoxiconazole	200 g/L	133855-98-8	406-850-2	Carc Cat 2 (H351) Repr. Cat 1B (H360Df) Repr. Cat 2 (H361) Aquatic Chronic 2 (H411)

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. If breathing is laboured oxygen should be supplied by qualified personnel only. Seek medical assistance immediately.

Skin contact:

Remove contaminated clothing and footwear. Wash skin gently but thoroughly with plenty of water and non-abrasive soap for 15 to 20 minutes. Seek medical assistance if irritation persists.

Eve contact: Immediately flush eyes with a stream of gently flowing water for 15 minutes, holding eyelids open. Remove contact lenses, if present, after the first 5 minutes. Seek medical assistance if irritation occurs. Ingestion: Never give anything by mouth to an unconscious person. Do not induce vomiting, unless instructed to do so by a physician. If vomiting occurs, keep head lower than hips to prevent aspiration. Rinse mouth thoroughly with water if person is conscious and alert. Plenty of water may be given to drink if able to swallow. For advice, contact the National Poisons Centre. Seek medical assistance immediately. Most important symptoms and effects, both acute and None known. delayed: Indication of any immediate medical attention and No specific antidote known. Treat symptomatically and special treatment needed: supportively. 5) FIRE-FIGHTING MEASURES: **Extinguishing Media:** Fine water spray, foam, carbon dioxide, dry chemical powder. **Unsuitable Extinguishing Media:** Do not use high volume water jet, due to contamination risk. Specific Hazards arising from the substance/mixture: Dust/air mixture may be explosive in the presence of an ignition source. Fire may produce irritating and/or toxic vapors, mists or other products of combustion. Fire Fighting: 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. Water can be used to cool unaffected containers but must be contained for later disposal. Do not scatter the material. Avoid pollution of waterways. Contain firefighting water for later disposal. Avoid the accumulation of polluted run-off from site. Full protective clothing and self-contained breathing Protective clothing: apparatus. 6) ACCIDENTAL RELEASE MEASURES: Personal precautions, protective equipment and Do not breathe in spray or fumes. Avoid contact with skin and emergency procedures: eyes. For personal protection see Section 8. Prevent further leakage or spillage if safe to do so. Do not **Environmental precautions:** 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. Considered a marine pollutant. Wear protective clothing and avoid breathing mist/vapour. Methods and material for containment and cleaning up: Clear area of unprotected personnel. Ventilate area. Contain and absorb liquid spills with inert material, remove by scoop or vacuum. Use approved industrial vacuum cleaner for removal and place in waste containers. Wash area with water and detergent and absorb with further inert material. Heavily contaminated soil layers have to be dug out down to clean soil. If spill does enter waterways contact the local authority. Spilled product cannot be re-used and must be disposed of by incineration or disposal in a chemical waste disposal facility. If containers cannot be recycled, they should be disposed of together with the waste chemical. 7) HANDLING & STORAGE: **Precautions for Safe Handling:** Harmful if swallowed. Avoid skin and eye contact and inhalation of spray mist. Wash hands before breaks and immediately after handling the product. When using, do not eat, drink or smoke. Wash contaminated clothing before re-use. Do not apply directly to

	areas where surface water is present. Water used to clean equipment must be disposed of correctly to avoid contamination. 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.		
Conditions for Safe Storage, including any incompatibilities:	Store in original container tightly closed and in a locked, dry, cool area away from foodstuffs, fertilisers and seeds. Keep away from animals, children or uninformed persons.		
8) EXPOSURE CONTROL / PERSONAL PROTECTION:	Store away from heat or open flames.		
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:	IngredientCAS#LimitBasisAzoxystrobin131860- 33-82 mg/m³TWA		
PERSONAL PROTECTIVE EQUIPMENT:	Consult supplier to confirm that the equipment is suitable.		
Clothing:	Employee must wear appropriate protective (impervious) clothing and equipment to prevent repeated or prolonged skin contact with this substance. Wear long-sleeved shirt and long pants, chemical-resistant footwear. Wash contaminated clothing and clean protective equipment before re-use.		
Respiratory protection:	Wear an approved respirator suitable for protection from mists of pesticides if ventilation is inadequate.		
Gloves:	Employee must wear appropriate chemical-resistant gloves to prevent contact with this substance		
Eye protection:	The use of safety goggles with side shields is recommended.		
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:	This could be a considered as		
Form:	Liquid, Suspension concentrate		
Colour: Odour:	White Characteristic odour		
Solubility:	Suspends in water		
pH:	6.3		
Odour threshold:	Not available		
Melting point / Freezing point Initial boiling point and boiling range	Not available Not available		
Flash point:	Not applicable		
Evaporation rate:	Not available		
Flammability (solid, gas)	Not flammable		
Upper/ lower flammability or explosive limits:	Not explosive		
Vapour descity:	Not available Not available		
Vapour density: Relative density:	1.078 g/L		
Partition coefficient: n-octanol/water	Not available		
Auto-ignition temperature:	Not available		
Viscosity:	Not available		
10) STABILITY & REACTIVITY:			
Reactivity:	Stable under normal conditions.		
Chemical Stability:	When stored appropriately this product should show no significant degradation for 2 years from the date of manufacture.		
Possibility of hazardous reactions:	Polymerization will not occur.		
Conditions to avoid:	Protect from sunlight, open flames and sources of heat.		

Incompatible materials:	Avoid contact with strong oxidizing agents and strong acids.	
Hazardous decomposition product(s):	Dust/air mixture may be explosive in the presence of an ignition source. Fire may produce irritating and/or toxic vapors, mists or other products of combustion.	
11) TOXICOLOGICAL INFORMATION:		
Acute Toxicity:		
Oral:	LD_{50} (Rat): > 5,000 mg/kg.	
Dermal: Inhalation:	LD ₅₀ (Rat): > 2,000 mg/kg	
Skin Corrosion/Irritation:	LC ₅₀ (Rat, 4 hours): >4,21 mg/m ³ air. Non-irritating	
Serious Eye Damage/Irritation:	Non-irritating	
Respiratory or Skin Sensitization:	Did not cause sensitization on laboratory animals.	
Germ Cell Mutagenicity:	Technical material is not mutagenic.	
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: Azoxystrobin Birds:	Acute oral LD ₅₀ for mallard ducks and bobwhite quail >2000	
Fish:	mg/kg. <u>LC₅₀</u> (5 d) for bobwhite quail and mallard ducks >5200 mg/kg diet. <u>LC₅₀</u> (96 h) for rainbow trout 0.47, bluegill sunfish 1.1, carp	
Daphnia:	1.6, sheepshead minnows 0.66 mg/l. For degradate R234886, <u>LC₅₀</u> >150 mg/l. <u>EC₅₀</u> (48 h) 80 µg/l. <u>EC₅₀</u> for degradates: R234886 >180,	
Algae:	R401553 >50, R402173 >50 mg/l. EC ₅₀ (120 h) for Selenastrum capricornutum 0.12 mg/l.	
Worms: Bees:	LC ₅₀ (14 d) for earthworms 283 mg/kg. (oral) >25 µg/bee; (contact) >200 µg/bee.	
Ecotoxicity: Epoxiconazole		
Birds:	Acute oral LD50 for quail > 2000 mg/kg. LC50 for quail 5000	
Fish:	mg/kg. LC50 (96h) for trout 2.2 – 4.6 mg/kg, Bluegill sunfish 4.6- 6.8 mg/kg.	
Daphnia:	LC50 (48h) 8.7 mg/L.	
Algae:	EC50 (72 h) for green algae 2.3 mg/L.	
Worms:	EC50 (14 d) > 1000 mg/kg soil.	
Bees:	LD50 > 100 µg/bee Azoxystrobin: Rapidly degraded in soil. On soil, photolysis	
Persistence and Degradability:	DT ₅₀ 11 d. Epoxiconazole: Degradation in soil is by microbial activity, DT50 c. 2-3 months.	
Bio-accumulative Potential:	Azoxystrobin: Low potential for bioaccumulation;	
Mobility in Soil:	Azoxystrobin: Azoxystrobin and its degradates have low to moderate mobility in soil, typical K₀c c. 500. Epoxiconazole: K₀c 957 − 2647.	
13) DISPOSAL CONSIDERATIONS:		
Waste Disposal:	In accordance with local and national regulations. Open dumping or burning of this pesticide is prohibited. Do not re-use or reprocess waste. 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 on site or at an approved chemicals waste disposal facility.	
Container Disposal:	Refer to the product label for instructions. 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:		
Road Transport ADR / IRD:	UN NUMBER: 3082 UN Proper Shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Azoxystrobin, 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. (Azoxystrobin, 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: Transport in Bulk (according to Annex II of MARPOL	UN NUMBER: 3082 UN Proper Shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Azoxystrobin, 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. No transport in bulk according to the IBC Code.			
73/78 and the IBC Code):	The transport in bank according to the 120 code.			
15) REGULATORY INFORMATION:				
Safety, health and environmental regulations/legislation	For the user of this plant-protective product applies: 'To			
specific for the substance/mixture:	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:				

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 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.

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.

Date of issue: 20/06/2019

Abbreviations and acronyms:

- 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. TWA: Time Weighted Average.

Literature References:

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