

# Safety Data Sheet

Issue No: 1.0	1 <sup>st</sup> Edition: November 2019
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## 1. IDENTIFICATION OF THE SUBSTANCE AND SUPPLIER

Product Name: **Evolve 480 SC**  
 Recommended Use: Agricultural fungicide  
 Supplier: ICA International Chemicals (Pty) Ltd  
 Address: 28 Planken Street  
 Plankenbrug Industrial  
 STELLENBOSCH · 7600 · SOUTH AFRICA  
 Telephone No: +27 (0) 21 886 9812  
 Fax No: +27 (0) 21 886 8209  
 Emergency Tel No: Griffon Poison Information Centre +27 82 446 8946  
 Poisons Helpline 0861 555 777

## 2. HAZARD IDENTIFICATION ON PRODUCT

GHS classification of product Acute Oral and Dermal Toxicity Category 5  
 Acute Inhalation Toxicity Category 4  
 Causes mild skin irritation Category 3  
 Acute aquatic toxicity Category 1  
 Hazardous to the aquatic environment chronic Category 2

GHS Label elements



Signal Word

**Warning**

Hazard Statements

H303 May be harmful if swallowed  
 H313 May be harmful in contact with skin  
 H332 Harmful if inhaled  
 H316 Causes mild skin irritation  
 H320 Causes eye irritation  
 H400 Very toxic to aquatic life  
 H411 Toxic to aquatic life with long lasting effects

Precautionary Statements

P101 If medical advice is needed: Have product container or label at hand  
 P102 Keep out of reach of children  
 P103 Read carefully and follow all instructions  
 P301+P312 If swallowed/on skin/inhaled: Call a doctor if you feel unwell  
 P337+P313 If eye irritation persists: Get medical advice/attention.  
 P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
 P332 + P313: If skin irritation occurs: Get medical advice/attention.  
 P264 Wash thoroughly after handling  
 P273 Avoid release to the environment  
 P391 Collect spillage  
 P403 + P233 Store in a well-ventilated place. Keep container tightly closed.  
 P405 Store locked up  
 P501 Dispose of container and contents in accordance with local/national regulations.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>INGREDIENT(S)</u>	<u>CAS NO:</u>	<u>Concentration (g/l)</u>
Azoxystrobin	131860-33-8	240
Fludioxonil	131341-86-1	240
Non-Hazardous substances		

### 4. FIRST AID MEASURES

**Show this SAFETY DATA SHEET to a doctor.**

- INGESTION:**
- No emergency medical treatment necessary.
- INHALATION:**
- Treat symptomatically. Remove patient from source of exposure and move to fresh air.
  - Get medical advice if feeling unwell.
- EYES:**
- Treat symptomatically. Remove any contact lenses. Rinse eyes immediately with plenty of clean water for at least 15 minutes. Hold eyelids apart while flushing.
  - Seek medical help if irritation continues.
- SKIN:**
- Treat symptomatically. Remove contaminated clothing and take a shower.
  - Rinse affected areas (skin) immediately with plenty of water.
  - If skin irritation occurs: Get medical attention/advice
- NOTE TO PHYSICIAN:**
- Treat symptomatically.
- POTENTIAL HEALTH AFFECTS:**
- No significant adverse effects expected.

### 5. FIRE FIGHTING MEASURES

- SUITABLE EXTINGUISHING MEDIA:**
- Foam, dry chemical, carbon dioxide
- HAZARDS FROM COMBUSTION PRODUCTS:**
- Carbon monoxide, carbon dioxide, hydrochloric acid, nitrogen oxides.
- PRECAUTIONS FOR FIRE FIGHTERS:**
- Fire fighters should wear full protective gear including self-containing breathing apparatus. Evacuate nonessential personnel from the area to prevent human exposure to fire, smoke, fumes or products of combustion.
- HAZCHEM CODE:**
- 2X
- Further information:**
- If possible, safely remove intact containers from the fire.
  - Keep containers cool by spraying with water if exposed to fire
  - Collect contaminated extinguishing water separately, do not allow to reach sewage or effluent systems.
  - Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.
  - In case of fire and/or explosion do not breathe fumes.

### 6. ACCIDENTAL RELEASE MEASURES

#### **SPILL OR LEAK:**

- Avoid contact with spilled material or contaminated surfaces.
- DO NOT eat, drink or smoke.
- Wear personal protective clothing and equipment (see section 8). Keep people and animals away.
- Control the spill at its source. Contain the spill immediately. Sweep up material or collect with absorbent material, scrub area with hard water detergent. Pick up wash liquid with additional absorbent material and place all collected in a container for disposal. Seal container and arrange for disposition.
- PREVENT spilled material from entering drains or sewer systems. Dike and bund area with sand/earth to prevent contamination of drains or sewers.

### 7. HANDLING AND STORAGE

- PRECAUTIONS FOR SAFE HANDLING:** Wear suitable protective clothing (Dust mask; Eye shields, Gloves)

No special measures necessary if stored and handled correctly.  
 Keep away from heat, protect from sunlight and from freezing.  
 Ensure thorough ventilation of stores and work areas  
 Wash hands, arms and face after use. Wash gloves and contaminated protective clothing daily.

**CONDITIONS FOR SAFE STORAGE:** Store out of reach of children, tightly closed in original containers, which include the complete label, in a cool, dry and well ventilated area out of direct sunlight.  
 Segregate from foods and animal feeds.

## 8. EXPOSURE CONTROL / PERSONAL PROTECTION

**AOEL:** Acceptable Operator Exposure Level EU –  
 Azoxystrobin 0.2 mg/kg bw/day  
 Fludioxonil 0.59 mg/kg bw/day

**ENGINEERING CONTROLS:** Facilities should be equipped with an eyewash facility and a safety shower.

**PERSONAL PROTECTIVE EQUIPMENT:** Wear suitable protective clothing which include chemical-resistant footwear, dust mask; eye shields and gloves (chemical-resistant gloves made of any waterproof material such as nitrile, butyl, neoprene and/or barrier laminate).

A respirator not normally required when handling this product.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**APPEARANCE (colour; physical form)** Beige liquid, homogenous suspension  
**ODOUR:** Slight chemical  
**pH (1 % in water)** 7.4  
**DENSITY:** ~ 1.16g /mℓ  
**FOAMING 50 mℓ/100 ℓ water** 10 m ℓ  
**WET SIEVE TEST** < 0.1 %  
**FLASH POINT** No flashpoint below 84 °C  
**FLAMMABILITY** Not flammable

## 10. STABILITY AND REACTIVITY

**CHEMICAL STABILITY:** Stable under normal conditions of use  
**CONDITIONS TO AVOID:** Excessive heat, freezing

## 11. TOXICOLOGICAL INFORMATION

### ANIMAL ACUTE TOXICITY DATA (ATE)

**ORAL:** LD<sub>50</sub> (rat) >5 000 mg/kg Low  
**DERMAL:** LD<sub>50</sub> (rats) > 4 000 mg/kg bw.  
**INHALATION:** LC<sub>50</sub> (4h) rat 2.3 mg/ℓ  
**SKIN:** Slight irritant  
**EYES** Slight irritant

Not a skin sensitizer. In studies not mutagenic and neurotoxic.

## 12. ECOLOGICAL INFORMATION (a.i.)

<b>AZOXYSTROBIN</b>	Birds	Acute oral: LD <sub>50</sub> mg/kg - Bobwhite Quail >2000
	Fish:	Acute oral: LD <sub>50</sub> mg/kg - Mallard duck >2000 Acute tox LC <sub>50</sub> - Rainbow trout = 0.47 mg/l Fathead minnow - NOEC = 0.147 mg/l
	<i>Daphnia magna</i> :	Chronic 21 day NOEC = 0.044 mg/l
	Green Algae:	Effect on growth, static water 96 h E <sub>b</sub> C <sub>50</sub> = 0.36 mg/l
	Honeybees	Acute Oral 24 hour LD <sub>50</sub> – >25 µg a.i/bee Acute Contact 24 hour LD <sub>50</sub> - >200 µg a.i/bee
	Earthworms	Reproduction toxicity: 14 day LC <sub>50</sub> 881 mg/kg dry soil. NOEC = 20 mg/kg (formulation).

<b>ECOLOGICAL FATE:</b>	Persistence / Degradability	Azoxystrobin can persist for several months or longer. The US EPA concluded that the a.i. have properties similar to chemicals which are known to leach through soil to ground water under certain conditions.
<b>FLUDIOXONIL</b>	Birds : LD <sub>50</sub> (oral)	Mallard ducks > 2000 mg/kg; Fludioxonil (a.i.) Bobwhite quail > 2000 mg/kg. Fludioxonil (a.i.)
	Fish : LC <sub>50</sub> (96h)	Rainbow trout 0.23 mg/l Fludioxonil (a.i.) Bluegill Sunfish 0.74 mg/l Fludioxonil (a.i.)
	Daphnia : LC <sub>50</sub> (48h)	0.4 mg/l Fludioxonil (a.i.)
	Bees : LD <sub>50</sub> (oral and contact)	100 ug/ bee Fludioxonil (a.i.)
	Earthworms : LC <sub>50</sub> (14d)	>1000 mg/kg Fludioxonil (a.i.) dry soil
<b>PERSISTENCE, DEGRADABILITY and MOBILITY:</b>		Fludioxonil (soil) has a low potential for leaching (non-mobile) DT <sub>50</sub> soil 100 – 365 d.

### 13. DISPOSAL CONSIDERATIONS

On site disposal of the concentrated product is not acceptable. Ideally, the product should be used for its intended purpose. If there is a need to dispose of the product, approach local authorities.

Invert empty container over mix or spray tank and allow draining for at least 30 seconds until flow has slowed to a drip. Triple rinse the empty container with clean water equal to a minimum of 30 % of the volume of the container. Add rinsing to the contents of the spray tank. Replace cap and return clean container to recycler. . If not recycling, break, crush or puncture and deliver empty packaging to an approved waste management facility. Do not use container for any other purpose.

DO NOT burn empty containers or product.

DIP Disposal: According to local legislative requirements

### 14. TRANSPORT INFORMATION

<b>UN NUMBER:</b>	3082
<b>PROPER SHIPPING NAME:</b>	Environmentally hazardous substance, liquid, n.o.s. (contains azoxystrobin and fludioxonil), liquid
<b>CLASS AND SUBSIDIARY RISK(S):</b>	Class 9
<b>PACKING GROUP:</b>	III (minor danger)
<b>HAZCHEM CODE:</b>	2Z
<b>Tel No:</b>	+27 (0) 21 886 9812

### 15. REGULATORY INFORMATION

South African Registration number L10644, Act No. 36 of 1947

### 16. OTHER INFORMATION

This Safety Data Sheet (SDS) summarises our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. Each user should read this SDS and consider the information in the context of how to prevent accidents in the normal workplace including in conjunction with other products.

The information was obtained from sources which we believe are reliable. However, the information is provided in good faith. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and for this reasons we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used for this product only.

END of SDS