

SECTION 1 - PRODUCT & COMPANY IDENTIFICATION

ARYSTA LifeScience South Africa (Pty) Ltd
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Substance: azoxystrobin
Product Name: **AROXY 250 SC**
Product Use: Fungicide
Creation Date: April 2011
Revision Date: August 2019

24 Hr Emergency Number:**In case of Poisoning:**

Poisons Helpline 0861 555 777

In case of Spillage:

Spill Tech Oil & Chemical Pollution Control 086 100 0366 / 083 253 6618

SECTION 2 - COMPOSITION / INFORMATION ON INGREDIENTS

Common Name: Azoxystrobin
Chemical Name: Methyl (E)-2-{2 [6-(2-cyanophenoxy)pyrimidin-4-yloxy]phenyl}-3-methoxyacrylate
Chemical family: Strobilurin
CAS No.: 131860-33-8
Chemical formula: C₂₂H₁₇N₃O₅
Use: Systemic and translaminar fungicide with curative properties for the preventative control of diseases.
Formulation: azoxystrobin 250 g/l
Suspension concentrate

Hazardous ingredients of toxicological concern:

| <u>Inert:</u> | <u>concern:</u> | <u>% present:</u> |
|---------------|-----------------|-------------------|
| azoxystrobin | | ± 25 % |
| Water | none | > 65 % |

Symbols:**Indication of danger:**

Risk-phrase(s): R

SECTION 3 - HAZARD IDENTIFICATION

Toxicity class: Slightly hazardous, Group III - Caution.

Main Hazard: No specific effects and/or symptoms have been reported or are known. May be a slight irritant to eyes after contact with eyes. May be harmful when ingested, possible generalized symptoms of poisoning include nausea and vomiting.

Environmental hazards: Very toxic to fish and aquatic organisms. Azoxystrobin is non-toxic to earthworms, honeybees and mammals.

Effects and Symptoms: No human poisoning was reported.

SECTION 4 - FIRST AID MEASURES AND PRECAUTIONS**Inhalation:**

Immediately move patient to fresh air and keep warm and at rest. Obtain medical advice if necessary.

Skin contact:

Remove contaminated clothing, shoes and leather goods immediately. Gently wipe off excess chemical. Wash skin gently and thoroughly with clean water and non-abrasive soap or mild detergent until no evidence of chemical remains (approximately 15 to 20 minutes). Obtain medical advice if necessary.

Eye contact:**MATERIAL SAFETY DATA SHEET**

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Poisons Helpline 0861 555 777

Phone: 031 514 5600
Spillage Helpline (Spill Tech) 086 100 0366

Flush eyes immediately with large amounts of gently flowing cold water, occasionally lifting upper and lower lids, until no evidence of chemical remains (approximately 15 to 20 minutes). If irritation persists, obtain medical advice.

Ingestion:

Do not induce vomiting. Obtain medical advice immediately for treatment advice and make the container, or label or this Data Sheet available. Never give anything by mouth to a semi-conscious or unconscious person. If able to swallow, give person water to drink.

Advice to physician:

This product contains azoxystrobin and does not cause any definite symptoms that would be diagnostic.

There is no specific antidote available. Treat symptomatically and supportively.

SECTION 5 - FIRE-FIGHTING MEASURES

Fire and explosion hazard:

Azoxystrobin decomposes on heating above 114-116°C to emit toxic and flammable gasses.

Hazardous Combustion Products:

This product contains combustible organic components that may burn and decompose during a fire producing dense black smoke containing hazardous products of combustion. Combustion products are toxic and /or irritant. Exposure to decomposition products may be a hazard to health.

Extinguishing agents:

Extinguish small fires with carbon dioxide, dry powder, or alcohol-resistant foam. Water spray can be used for cooling of unaffected stock. Do not use direct jet of water. Avoid water coming in contact with the product. Contain water used for fire fighting for later disposal. Avoid the accumulation of polluted run-off from the site.

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. Keep upwind.

Remove container from fire area if possible and without risk. Dyke fire control water for later disposal. Do not scatter the material. Avoid pollution of waterways. Do not use high volume water jet, due to contamination risk. Contain water used for fire fighting for later disposal. Avoid the accumulation of polluted run-off from the site.

Personal protective equipment:

Fire-fighters and others that may be exposed should wear full chemical protective clothing and self-contained breathing apparatus. See section 8 for recommendations regarding Exposure Controls/Personal Protection. Fire may produce irritating or poisonous vapours of combustion.

SECTION 6 - ACCIDENTAL RELEASE MEASURES (SPILLAGE)

Personal precautions:

Do not breathe in mist or fumes. Avoid contact with skin and eyes. For personal protection see Section 8.

Environmental precautions:

Do not allow entering drains or watercourses. Is highly toxic to fish and aquatic species. In case of accidental spill, prevent the material from getting into lakes, rivers and other bodies of water. Isolate discharged material and keep material out of water sources. Spillage or uncontrolled discharges into water courses (or public waters) to be reported immediately to the Police and to the Department of Water/Environmental Affairs.

Occupational spill:

Keep spectators away and upwind. Remove all sources of flames and sparks. Do not touch spilled material; stop leak if you can do it without risk. Keep out unprotected persons and animals.

For spills: Soak up with absorptive material such as damp earth or sand or other suitable non-combustible absorbent material. Place the material into a clean, dry container and cover for subsequent disposal. In situations where product comes in contact with water, contain contaminated water for later disposal. Prevent material from spreading by damming in with absorptive material. Do not flush spilled material into drains. To decontaminate spill area, tools and equipment, wash with a suitable solution (i.e. organic solvent, detergent bleach or caustic). Add the solution to the drums already collected. Label drums with its content and dispose it in accordance with local regulations.

Open burning or dumping of this material is prohibited. **Do not get water inside containers.**

SECTION 7 - HANDLING AND STORAGE REQUIREMENTS

Handling: Wear appropriate protective equipment when handling the product. Do not handle material near food, feed or drinking water. Avoid contact with eyes, prolonged contact with skin, and inhalation of mist and vapour. Use with adequate ventilation. Do not eat, drink or smoke while working. Wash hands before eating, drinking, chewing gum, smoking, or using the toilet. Operators should change and wash clothing daily. Remove clothing immediately if the pesticide gets inside. Then wash skin thoroughly using a non-abrasive soap and put on

MATERIAL SAFETY DATA SHEET

clean clothing. Do not apply directly to areas where surface water is present, or to intertidal areas below the mean high water mark. Water used to clean equipment must be disposed of correctly to avoid contamination.

Storage: Keep under lock and key and out of reach of unauthorised persons, children and animals. Store in its original labelled container in isolated, dry, cool and well-ventilated area, away from heat, sparks and other sources of ignition. No smoking is allowed. Protect the product from temperatures below 0 °C and above 48 °C. Not to be stored next to feeds, food and water supplies. Avoid breaking the containers, spillage or leaks. Comply with the local regulations.

SECTION 8 - EXPOSURE CONTROL/PERSONAL PROTECTION

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.

PERSONAL PROTECTIVE EQUIPMENT:

If engineering controls and work practices are not effective in controlling exposure to this material, then wear suitable personal protective equipment including approved respiratory protection.

Respirator:

It is usually safe to use the product without a mask or respirator. If the product is used in dusty or confined conditions, a mask or respirator suitable for protection from dusts and mists of pesticides is adequate. Limitations of respirator use specified by the approving agency and the manufacturer must be observed.

Clothing:

Employee must wear appropriate protective (impervious) clothing and equipment to prevent repeated or prolonged skin contact with this substance.

Gloves:

Employee must wear appropriate synthetic protective gloves to prevent contact with this substance.

Eye protection:

Wear safety goggles or face shield.

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.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

| | |
|-----------------------------|--|
| Appearance: | white to off-white suspension concentrate liquid |
| Odour: | no particular odour |
| Relative density: | 1,09 g/cm ³ ± 0,01 |
| Solubility in water: | miscible |
| pH: | 6,8 - 7 |
| Flash point: | > 97 °C |
| Flammability: | not flammable |

SECTION 10 - STABILITY AND REACTIVITY

Stability:

Considered stable in unopened original packages, under normal, dry storage conditions. Compatible with most commonly used fungicides, mineral oils and wetting agents. Always perform a compatibility test before using with other products. Do not physically mix concentrate directly with other pesticide concentrates, always dilute first.

Storage stability:

Stable for 2 years under normal, dry storage conditions in unopened packages. Avoid extreme storage conditions and temperatures of below 0 °C and above 48 °C.

Incompatibility:

Avoid contact with oxidizing agents and acids.

Thermal decomposition:

Combustion or thermal decomposition will evolve toxic and irritant vapours. Hazardous polymerization does not occur.

SECTION 11 - TOXICOLOGICAL INFORMATION

Acute oral LD₅₀ rats: > 2000 mg/kg calculated for formulation

Acute dermal LD₅₀ rabbits: > 4000 mg/kg calculated for formulation

MATERIAL SAFETY DATA SHEET

Inhalation LC₅₀ rats: Technical: 0,69 mg/ℓ (4hours)
Harmful

Acute eye irritation: Slight to moderate irritant

Acute skin irritation: Moderate irritant

Azoxystrobin showed no evidence of reproductive toxicity, caused no developmental toxicity in rat or in rabbit, and gave a weak clastogenic response, however is considered to have no genotoxicity in vivo.

SECTION 12 - ECOLOGICAL INFORMATION

ECOTOXICITY:

Birds: Low toxicity

Acute LD₅₀ Mallard duck: > 2000 mg/kg
Bobwhite quail: > 2000 mg/kg

Fish: Highly toxic

LC₅₀ (96hrs) Rainbow trout: 0,47 mg/ℓ
Bluegill sunfish: 1,1 mg/ℓ

Toxicity to daphnia and other aquatic invertebrates: Highly toxic to certain aquatic invertebrates

Daphnia magna: EC₅₀ (48hrs) 0,28 mg/ℓ

Toxicity to algae: Moderately toxic to algae

EC₅₀ (120hrs) *Selenastrum capricornutum*: 0,12 mg/ℓ
Diatom Navicula pelliculosa: 0,014 mg/ℓ

Earthworms: Slightly toxic

Eisenia foetida (earthworm): LC₅₀ (14 days) 283 mg/kg.

Bees: Non toxic to bees

Oral LD₅₀ > 25 µg/bee,
Contact LD₅₀ >200 µg/bee

Environmental Fate:

Azoxystrobin is degraded rapidly under agricultural field conditions with soil half-life of less than 2 weeks. Mobility in soil is relatively low to medium and does not leach. Therefore very unlikely to be present in drinking water and groundwater.

SECTION 13 - DISPOSAL CONSIDERATION

Pesticide disposal:

Open dumping or burning of this pesticide is prohibited. Waste resulting from the use of this product that cannot be reused or reprocessed should be disposed of in a landfill approved for pesticide disposal. Do not contaminate rivers, dams or any other water sources with the product or used containers. Never pour untreated waste or surplus products into public sewers or where there is any danger of run-off or seepage into water systems. Comply with local legislation applying to waste disposal.

Package product wastes:

Emptied containers retain vapour and product residues. Observe all labelled safeguards. TRIPLE RINSE empty containers in the following manner: Invert the empty container over the spray or mixing tank and allow to drain for at least 30 seconds after the flow has slowed down to a drip. Thereafter, rinse the container three times with a volume of water equal to a minimum of 10 % of that of the container. Add the rinsings to the contents of the spray tank before destroying the container.

Destroy the emptied containers by perforation and flattening. Bury in an approved dump site. Do not re-use the empty container for any other purpose. Comply with any local legislation applying to disposal.

SECTION 14 - TRANSPORT INFORMATION

UN NUMBER: 3082

Road Transport ADR/IRD:

Class: 9
Packing group: III
Shipping name: Environmentally Hazardous Substance, Liquid, N.O.S. (Azoxystrobin, 25%)

Maritime Transport IMDG/IMO:

Class: 9
Packing group: III
Shipping name: Environmentally Hazardous Substance, Liquid, N.O.S. (Azoxystrobin, 25%)

Considered a Marine Pollutant.

MATERIAL SAFETY DATA SHEET

SECTION 15 - REGULATORY INFORMATION

Symbol: Xn, N
Indication of danger: Harmful, Environmentally Hazardous Substance.

Risk phrases:

R 20/22 Harmful by inhalation and if swallowed.
R 36/38 Irritating to eyes and skin.
R 50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety phrases:

S 2 Keep out of the reach of children.
S 13 Keep away from food, drink and animal feeding stuffs.
S 24/25 Avoid contact with skin and eyes.
S 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
S 60 This material and its container must be disposed of as hazardous waste.
S 61 Avoid release to the environment. Refer to special instructions/safety data sheets.

SECTION 16 - OTHER INFORMATION**Packaging and Labelling:**

Packed in 200 ml, 500 ml & 1, 2, 5, 10, 20 and 25 l fluorinated plastic containers and labelled according to South African regulations and guidelines.

Disclaimer:

The information on this sheet is not a specification; it does not guarantee specific properties. The information is intended to provide general guidance as to health and safety based upon our knowledge of the handling, storage use of the product. It is not applicable to unusual or non-standard uses of the product nor where instructions or recommendations are not followed.

All information is given in good faith but without guarantee in respect of accuracy, and no responsibility is accepted for errors and omissions or the consequence thereof.

MATERIAL SAFETY DATA SHEET