



MATERIAL SAFETY DATA SHEET **QUARTIZ 25 SC**

IDENTIFICATION OF THE SUPPLIER:

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PRODUCT IDENTIFICATION:

Common Name: Azoxystrobin 25% w/v
Trade Name: Quartiz 25 SC
Type of formulation : Suspension Concentrate (SC)
Chemical Name: (E)-2-[[6-(2-cyanophenoxy)-4-pyrimidinyl]oxy]-□-(methoxymethylene)benzeneacetate
Chemical Formula: C₂₂H₁₇N₃O₅
Molecular Weight: 403.4 [

PRODUCT COMPOSITION:

Active Ingredient:	% w/v	CAS #
Azoxystrobin	25%	[131860-33-8]
Inert ingredient:		
Dispersing, wetting agent	14%	--
Solvent (water)	Up to 100%	--

HAZARDS IDENTIFICATION:

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



FIRST-AID MEASURES:

Inhalation: Remove to fresh air. If breathing is irregular or stopped, administer artificial respiration. Keep patient warm and at rest. Call a physician or Poison Control Centre immediately.

Skin contact: Take off all contaminated clothing immediately. Wash off immediately with plenty of water. If skin irritation persists, call a physician. Wash contaminated clothing before re-use.

Eye contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses. Immediate medical attention is required.

Ingestion: If swallowed, seek medical advice immediately and show this container or label. Do NOT induce vomiting.

Medical advice: There is no specific antidote available. Treat symptomatically.

Advice to Doctor: No specific antidote. Treat according to symptoms.

FIRE-FIGHTING MEASURES: -

Suitable extinguishing media:

Extinguishing media - small fires

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Extinguishing media - large fires

Alcohol-resistant foam

Water spray

Extinguishing media which must not be used for safety reasons:

Do not use a solid water stream as it may scatter and spread fire.

Specific hazards during fire fighting:

As the product contains combustible organic components, fire will produce dense black smoke containing hazardous products of combustion. Exposure to decomposition products may be a hazard to health.

Special protective equipment for firefighters:

In the event of fire, wear self-contained breathing apparatus.

Further information:





Do not allow run-off from fire fighting to enter drains or water courses.
Cool closed containers exposed to fire with water spray.

ACCIDENTAL RELEASE:

Personal precautions: Refer to protective measures.

Environmental precautions:

Prevent further leakage or spillage if safe to do so.

Do not flush into surface water or sanitary sewer system.

Methods for cleaning up:

Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations.

Additional advice: If the product contaminates rivers and lakes or drains inform respective authorities.

HANDLING AND STORAGE:

HANDLING

Advice on safe handling: No special technical protective measures required.

No special handling advice required.

Avoid contact with skin and eyes.

When using, do not eat, drink or smoke.

STORAGE

Requirements for storage areas and containers:

No special storage conditions required.

Keep containers tightly closed in a dry, cool and well-ventilated place.

Keep out of the reach of children.

Keep away from food, drink and animal feeding stuffs.



PERSONAL PROTECTION/SAFETY:

Protective measures: The use of technical measures should always have priority over the use of personal protective equipment.

When selecting personal protective equipment, seek appropriate professional advice.

Personal protective equipment should be certified to appropriate standards.

Respiratory protection: No personal respiratory protective equipment normally required.

A particulate filter respirator may be necessary until effective technical measures are installed.

Hand protection: Chemical resistant gloves are not usually required.

Select gloves based on the physical job requirements.

Eye protection: Eye protection is not usually required.

Follow any site specific eye protection policies.

Skin and body protection: No special protective equipment required.

Select skin and body protection based on the physical job requirements.

PHYSICAL AND CHEMICAL PROPERTIES:

Form: suspension

Colour: off-white to yellow orange

Oxidizing properties: not oxidizing

Explosive properties: Not explosive

Density: 1.09 g/cm³ at 20 °C

Water solubility: Miscible

Solubility in H₂O: 6 mg/l in water @ 68°F (20°Azoxystrobin Technical: C)

Vapor Pressure: Azoxystrobin Technical: 8.25 x 10⁽⁻¹³⁾ mmHg @ 68°F (20°C)

STABILITY AND REACTIVITY:

Hazardous decomposition products:

Combustion or thermal decomposition will evolve toxic and irritant vapors.

Hazardous reactions: None known.

Hazardous polymerization does not occur.

Stable under normal conditions.



TOXICOLOGICAL INFORMATION:

Acute Toxicity/Irritation Studies (Finished Product)

Ingestion: Practically Non-Toxic

Oral (LD50 Rat): > 5000 mg/kg body weight

Dermal: Slightly Toxic

Dermal (LD50 Rat): > 4,000 mg/kg body weight

Inhalation: Practically Non-Toxic

Inhalation (LC50 Rat): > 6.32 mg/l air - 4 hours

Eye Contact: Mildly Irritating (Rabbit)

Skin Contact: Non-Irritating (Rabbit)

Skin Sensitization: Not a Sensitizer (Guinea Pig)

Reproductive/Developmental Effects

Azoxystrobin Technical:

Shows weak chromosomal damage in mammalian cells at cytotoxic levels. Negative in whole animal assays for chromosomal and DNA damage at high dosages (> or = 2,000 mg/kg). In rabbits, no effect was observed up to the highest dose level (500 mg/kg/day). In rats, developmental effects were seen only at maternally toxic doses (100 mg/kg/day).

Chronic/Subchronic Toxicity Studies

Azoxystrobin Technical:

In a rat 90-day feeding study, liver toxicity was observed at 2,000 ppm. This was manifest as gross distension of the bile duct, increased numbers of lining cells and inflammation of the duct. No toxicologically significant effects were seen in repeat dose dog studies.

Data reviews do not indicate any potential for endocrine disruption.

There is no evidence of neurotoxicity in any of the studies conducted with azoxystrobin.

Carcinogenicity

Azoxystrobin Technical:

No carcinogenic effects observed in rats or mice at doses up to the maximum tolerated dose.



Other Toxicity Information

The active ingredient in this formulation is Azoxystrobin Technical. Azoxystrobin Technical administered to pregnant rats even at doses which induced maternal toxicity did not induce birth defects. A study in rabbits using repeated doses showed no effects on the fetus despite the induction of maternal toxicity. The no-observed effect for developmental effects in the rabbit was 500 mg/kg/day. Rat 100 mg/kg/day. A multi-generation reproductive performance study in rats with Azoxystrobin Technical showed no-observed effect at 300 ppm in the diet. This equates to a dose level of 33 mg/kg/day.

ECOLOGICAL INFORMATION:

Summary of Effects

Azoxystrobin Technical:

Highly toxic to fish and invertebrates. Practically non-toxic to birds and bees.

Ecotoxicity Effects

Toxicity to fish:

LC50 *Oncorhynchus mykiss* (rainbow trout), 2.4 mg/l, 96 h

LC50 Bluegill sunfish, 1.1 mg/l

Toxicity to aquatic invertebrates:

EC50 *Daphnia magna* (Water flea), 0.47 mg/l, 48 h

Toxicity to algae: ERC50 *Pseudokirchneriella subcapitata* (green algae), 0.26 mg/l

EBC50 *Pseudokirchneriella subcapitata* (green algae), 0.23 mg/l

Environmental Fate

No data available for the formulation. The information presented here is for the active ingredient, azoxystrobin.

Bioaccumulation: Azoxystrobin has medium potential for bioaccumulation.

Stability in water: Azoxystrobin is stable in water

Stability in soil: Azoxystrobin is not persistent in soil.

Persistence (Half-Life): Soil: 7 - 56 days. Water: Stable.

Photolysis (Half-Life): Soil: 11 days Water: 11 - 17 days.

Leaching/Mobility: Low-moderate mobility (Koc = 500).

Action in Water (after 24 hrs.): Sinks.



DISPOSAL CONSIDERATIONS:

Product:

Do not contaminate ponds, waterways or ditches with chemical or used container.

Do not dispose of waste into sewer.

Where possible recycling is preferred to disposal or incineration.

If recycling is not practicable, dispose of in compliance with local regulations.

Contaminated packaging:

Empty remaining contents.

Triple rinse containers.

Empty containers should be taken for local recycling or waste disposal.

Do not re-use empty containers.

