



**Material Safety Data Sheet**  
**STRATEGO® FUNGICIDE**

MSDS Number: 102000016845  
 MSDS Version 2.0  
 Revision Date: 11/05/2007

**SECTION 1. CHEMICAL PRODUCT AND COMPANY INFORMATION**

**Product Name** STRATEGO® FUNGICIDE  
**MSDS Number** 102000016845  
**EPA Registration No.** 264-779

Bayer CropScience  
 2 T.W. Alexander Drive  
 Research Triangle PK, NC 27709  
 USA

For MEDICAL, TRANSPORTATION or other EMERGENCY call: 1-800-334-7577 (24 hours/day)  
 For Product Information call: 1-866-99BAYER (1-866-992-2937)

**SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS**

<u>Hazardous Component Name</u>	<u>CAS-No.</u>	<u>Average % by Weight</u>
Trifloxystrobin	141517-21-7	11.40
Propiconazole	60207-90-1	11.40

**SECTION 3. HAZARDS IDENTIFICATION**

*NOTE: Please refer to Section 11 for detailed toxicological information.*

**Emergency Overview** Warning! Causes substantial but temporary eye injury. Harmful if swallowed. Do not get in eyes or on clothing.

**Physical State** liquid

**Appearance** brown

**Routes of Exposure** Eye contact, Skin contact, Inhalation, Ingestion

**Immediate Effects**

**Eye** Causes substantial but temporary eye injury. Severe eye irritation. Do not get in eyes.

**Skin** May cause slight irritation. May cause sensitization by skin contact. Avoid contact with skin and clothing.

**Ingestion** Do not take internally. Harmful if swallowed.

**Inhalation** Avoid inhalation of vapour or mist.



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**Potential Environmental Effect** Toxic to fish. Toxic to aquatic invertebrates.

**SECTION 4. FIRST AID MEASURES**

<b>General</b>	When possible, have the product container or label with you when calling a poison control center or doctor or going for treatment.
<b>Eye</b>	Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a physician or poison control center immediately.
<b>Skin</b>	Take off contaminated clothing and shoes immediately. Wash off immediately with plenty of water for at least 15 minutes. Call a physician or poison control center immediately.
<b>Ingestion</b>	Call a physician or poison control center immediately. Rinse out mouth and give water in small sips to drink. DO NOT induce vomiting unless directed to do so by a physician or poison control center. Never give anything by mouth to an unconscious person. Do not leave victim unattended.
<b>Inhalation</b>	Move to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a physician or poison control center immediately.
<b>Notes to Physician Treatment</b>	There is no specific antidote. Appropriate supportive and symptomatic treatment as indicated by the patient's condition is recommended.

**SECTION 5. FIRE FIGHTING MEASURES**

<b>Flash point</b>	> 93.4 °C / 200.1 °F
<b>Autoignition Temperature</b>	no data available
<b>Lower Flammability Limit</b>	no data available
<b>Upper Flammability Limit</b>	not applicable
<b>Explosiveness</b>	no data available
<b>Suitable Extinguishing Media</b>	Carbon dioxide (CO2), Dry chemical, Alcohol-resistant foam



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**Fire Fighting Instructions**                      Avoid contact with spilled product or contaminated surfaces. Evacuate personnel to safe areas. Keep out of smoke. Fight fire from upwind position. Cool closed containers/ tanks exposed to fire with water spray.

Firefighters should wear NIOSH approved self-contained breathing apparatus and full protective clothing.

**SECTION 6. ACCIDENTAL RELEASE MEASURES**

**Personal Precautions**                      Keep unauthorized people away. Isolate hazard area. Avoid contact with spilled product or contaminated surfaces. Use personal protective equipment.

**Methods for Cleaning Up**                      Collect and transfer the product into a properly labelled and tightly closed container. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder). Contaminated soil may have to be removed and disposed.

Clean contaminated floors and objects thoroughly, observing environmental regulations. Decontaminate tools and equipment following cleanup.

**Additional Advice**                              Do not allow to enter soil, waterways or waste water canal. Do not allow product to contact vegetation.

Information regarding safe handling, see section 7. Information regarding personal protective equipment, see section 8. Information regarding waste disposal, see section 13.

**SECTION 7. HANDLING AND STORAGE**

**Handling Procedures**                      Handle and open container in a manner as to prevent spillage. Maintain exposure levels below the exposure limit through the use of general and local exhaust ventilation. For personal protection see section 8.

**Storing Procedures**                              Store in a cool, dry place and in such a manner as to prevent cross contamination with other pesticides, fertilizers, food, and feed. Store in original container and out of the reach of children, preferably in a locked storage area. Protect from freezing.

**Work/Hygienic Procedures**                      Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, using the toilet or applying cosmetics. Handle in accordance with good industrial hygiene and safety practice.

Remove contaminated clothing immediately and dispose of safely. Wash thoroughly and put on clean clothing.

**Min/Max Storage Temperatures**                      Recommended maximum transport/storage temperature: 50 °C / 122 °F  
 The storage temperature should not exceed the recommended maximum.



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**SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

<b>General Protection</b>	Follow all label instructions. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and warm/tepid water. Keep and wash PPE separately from other laundry.
<b>Eye/Face Protection</b>	Safety glasses with side-shields
<b>Hand Protection</b>	Chemical resistant nitrile rubber gloves
<b>Body Protection</b>	Wear long-sleeved shirt and long pants and shoes plus socks.
<b>Respiratory Protection</b>	When respirators are required, select NIOSH approved equipment based on actual or potential airborne concentrations and in accordance with the appropriate regulatory standards and/or industry recommendations.

**Exposure Limits**

Trifloxystrobin	141517-21-7	OES BCS*	2.7 mg/m3
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\*OES BCS: Internal Bayer CropScience "Occupational Exposure Standard"

**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>Appearance</b>	brown
<b>Physical State</b>	liquid
<b>Vapor Pressure</b>	0.0000034 hPa at approx. 25 °C
<b>Density</b>	approx. 1.09 g/cm <sup>3</sup> at 20 °C
<b>Water solubility</b>	approx. 0.00061 g/l
<b>Partition coefficient: n-octanol/water</b>	4.5 at 25 °C

**SECTION 10. STABILITY AND REACTIVITY**

<b>Chemical Stability</b>	24 Months
<b>Conditions to Avoid</b>	Freezing Extremes of temperature and direct sunlight.
<b>Hazardous</b>	Thermal decomposition



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**Decomposition Products** Carbon dioxide (CO<sub>2</sub>)  
Carbon monoxide  
Nitrogen oxides (NO<sub>x</sub>)

**Hazardous Reactions** Stable under recommended storage conditions.

## SECTION 11. TOXICOLOGICAL INFORMATION

Only acute toxicity studies have been performed on this product as formulated. The non-acute information pertains to the two technical-grade active ingredients, trifloxystrobin and propiconazole.

**Acute Oral Toxicity** male rat: LD50: 4,757 mg/kg  
female rat: LD50: 4,830 mg/kg

**Acute Dermal Toxicity** rat: LD50: > 5,050 mg/kg

**Acute Inhalation Toxicity** rat: LC50: > 2.2 mg/l  
Exposure time: 4 h  
Determined in the form of liquid aerosol.  
highest concentration tested  
No deaths

rat: LC50: > 8.8 mg/l  
Exposure time: 1 h  
Determined in the form of liquid aerosol.  
Extrapolated from the 4 hr LC50.

**Skin Irritation** rabbit: Slight irritation.

**Eye Irritation** rabbit: Severe eye irritation.

**Sensitization** guinea pig: Non-sensitizing.

**Chronic Toxicity** Trifloxystrobin caused liver effects in chronic studies in mice, rats and/or dogs.  
Propiconazole caused liver effects and/or stomach irritations in chronic studies in rodents and dogs.

### Assessment Carcinogenicity

Trifloxystrobin is not carcinogenic based on oncogenicity studies in rats and mice.

Propiconazole has been classified as a Group C (possible human carcinogen) chemical based on liver tumors in male mice. In lifetime feeding studies, propiconazole was not carcinogenic to rats or to female mice.

**ACGIH**  
None.  
**NTP**



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None.  
**IARC**  
 None.  
**OSHA**  
 None.

**Reproductive & Developmental Toxicity**

**REPRODUCTION:**  
 Trifloxystrobin is not considered a primary reproductive toxicant in rats.

Propiconazole was not considered a primary reproductive toxicant in a two-generation study in rats.

**DEVELOPMENTAL TOXICITY:**  
 Trifloxystrobin is not considered a primary developmental toxicant in laboratory animals. Developmental effects were observed only at doses that caused maternal toxicity.

Propiconazole is considered a developmental toxicant based on developmental toxicity studies in rats.

**Neurotoxicity**

Trifloxystrobin is not a primary neurotoxicant based on an acute (oral gavage) neurotoxicity screening study in rats.

Propiconazole caused minimal neurobehavioral effects without correlating neuropathological changes in neurotoxicity studies in rats.

**Mutagenicity**

Trifloxystrobin is not considered genotoxic based on in vitro and in vivo tests.

Propiconazole was not mutagenic or genotoxic in a battery of in vitro and in vivo tests.

**SECTION 12. ECOLOGICAL INFORMATION**

**Toxicity to Fish**

Bluegill sunfish  
 LC50: 0.046 mg/l

Cyprinus carpio (Carp)  
 LC50: approx. 0.025 mg/l

**Chronic Toxicity to Fish**

Oncorhynchus mykiss (rainbow trout)  
 flow-through test  
 NOEC: approx. 0.183 mg/l

**Environmental Precautions**

Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Drift and runoff from treated areas may be hazardous to aquatic organisms in adjacent sites. Do not contaminate surface or ground water by cleaning equipment or disposal of wastes, including equipment wash water.



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**SECTION 13. DISPOSAL CONSIDERATIONS**

**General Disposal Guidance** Do not contaminate water, food, or feed by disposal. Dispose in accordance with all local, state/provincial and federal regulations. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. Follow container label instructions for disposal of wastes generated during use in compliance with the product label.

**Container Disposal** Triple rinse containers. Do not re-use empty containers. Puncture container to avoid re-use. Dispose of empty container in a sanitary landfill or by incineration, or, if allowed by State/Provincial and local authorities, by burning. Follow advice on product label and/or leaflet.

**SECTION 14. TRANSPORT INFORMATION**

DOT CLASSIFICATION:  
Not regulated for Domestic Surface Transportation

TDG CLASSIFICATION:  
Not regulated for road or rail.

FREIGHT CLASSIFICATION:  
Insecticides or Fungicides, N.O.I.; other than poison

**SECTION 15. REGULATORY INFORMATION**

**EPA Registration No.** 264-779

**US Federal Regulations**

**TSCA list**

None.

**US. Toxic Substances Control Act (TSCA) Section 12(b) Export Notification (40 CFR 707, Subpt D)**

None.

**SARA Title III - Section 302 - Notification and Information**

None.

**SARA Title III - Section 313 - Toxic Chemical Release Reporting**

Propiconazole

60207-90-1

1.0%

**US States Regulatory Reporting**

**CA Prop65**

This product does not contain any substances known to the State of California to cause cancer.

This product does not contain any substances known to the State of California to cause reproductive harm.

**US State Right-To-Know Ingredients**

