



Material Safety Data Sheet
STRATEGO® YLD FUNGICIDE

MSDS Number: 102000020519
 MSDS Version 1.0
 Revision Date: 12/02/2008

SECTION 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

Product Name STRATEGO® YLD FUNGICIDE
MSDS Number 102000020519
EPA Registration No. 264-1093

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	32.30
Prothioconazole	178928-70-6	10.80
1,2-Propanediol	57-55-6	

SECTION 3. HAZARDS IDENTIFICATION

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

Emergency Overview Caution! May be harmful by inhalation, ingestion, skin adsorption. Causes eye irritation. May cause skin irritation. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Avoid contact with skin, eyes and clothing. Avoid inhalation of vapour or mist.

Physical State liquid suspension

Appearance off-white

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

Immediate Effects

Eye Causes eye irritation. Avoid contact with eyes.

Skin May cause slight irritation. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Avoid contact with skin and clothing.

Ingestion May be harmful if swallowed. Do not take internally.

Inhalation Avoid inhalation of vapour or mist. May be harmful if inhaled.



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Chronic or Delayed Long-Term	This product or its components may have target organ effects. This product or its components may have long term (chronic) health effects.
Potential Environmental Effect	Toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

SECTION 4. FIRST AID MEASURES

General	When possible, have the product container or label with you when calling a poison control center or doctor or going for treatment.
Eye	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.
Skin	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.
Ingestion	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.
Inhalation	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.
Notes to Physician Treatment	Treat symptomatically. There is no specific antidote.

SECTION 5. FIRE FIGHTING MEASURES

Fire and Explosion Hazards	In the event of fire the following may be released: Nitrogen oxides (NOx) Hydrogen cyanide (hydrocyanic acid) Hydrogen fluoride (HF) Carbon monoxide (CO) Sulphur oxides
Suitable Extinguishing Media	Water spray, Carbon dioxide (CO2), Foam, Sand



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Fire Fighting Instructions

Keep out of smoke. Fight fire from upwind position. Cool closed containers/ tanks exposed to fire with water spray. Do not allow run-off from fire fighting to enter drains or water courses.

In the event of fire and/or explosion do not breathe fumes. 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.

Methods for cleaning up

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder). Collect and transfer the product into a properly labelled and tightly closed container. Clean contaminated floors and objects thoroughly, observing environmental regulations.

Additional Advice

Use personal protective equipment. Do not allow to enter soil, waterways or waste water canal.

SECTION 7. HANDLING AND STORAGE

Handling Procedures

Maintain exposure levels below the exposure limit through the use of general and local exhaust ventilation. Handle and open container in a manner as to prevent spillage.

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.

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.

Remove Personal Protective Equipment (PPE) immediately after handling this product. Before removing gloves clean them with soap and water. Remove soiled clothing immediately and clean thoroughly before using again. Wash thoroughly and put on clean clothing.

Min/Max Storage Temperatures

Recommended minimum transport/storage temperature: -10 °C / 14 °F
Recommended maximum transport/storage temperature: 40 °C / 104 °F

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

General Protection

Follow all label instructions. Train employees in safe use of the product.



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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.

- Eye/Face Protection** Tightly fitting safety goggles
- Hand protection** Chemical resistant nitrile rubber gloves
- Body Protection** Wear long-sleeved shirt and long pants and shoes plus socks.
- Respiratory Protection** 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
Prothioconazole	178928-70-6	OES BCS*		1.4 mg/m3
1,2-Propanediol	57-55-6	WEEL	TWA	10 mg/m3
		TX ESL	ST ESL	20 ug/m3
		TX ESL	ST ESL	500 ppm
		TX ESL	AN ESL	2 ug/m3
		TX ESL	AN ESL	50 ppm

*OES BCS: Internal Bayer CropScience "Occupational Exposure Standard"

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

- Appearance** off-white
- Physical State** liquid suspension
- pH** 6.5 - 7.5 (10 %) at 25 °C
aqueous suspension
- Density** 1.16 g/cm³
- Viscosity** 908 mPa.s at 25 °C

SECTION 10. STABILITY AND REACTIVITY

- Hazardous Reactions** No hazardous reactions when stored and handled according to prescribed instructions.
Stable under recommended storage conditions.



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SECTION 11. TOXICOLOGICAL INFORMATION

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

Acute Oral Toxicity female rat: LD50: > 5,000 mg/kg

Acute Dermal Toxicity rat: LD50: > 5,000 mg/kg

Acute Inhalation Toxicity rat: LC50: > 2.6 mg/l
Exposure time: 4 h
Determined in the form of liquid aerosol.

rat: LC50: > 10.4 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: Mild eye irritation.

Sensitization guinea pig: Non-sensitizing.

Chronic Toxicity Trifloxystrobin caused liver effects in chronic studies in mice, rats and/or dogs.

Prothioconazole produced liver and kidney effects in chronic oral gavage studies in rats and dogs. In addition, secondary urinary bladder effects occurred at high dose levels in the rat.

Assessment Carcinogenicity

Trifloxystrobin was not carcinogenic in lifetime feeding studies in rats and mice.

Prothioconazole was not carcinogenic in lifetime studies in rats and mice.

ACGIH

None.

NTP

None.

IARC

None.

OSHA

None.

Reproductive & Developmental Toxicity

REPRODUCTION:

Trifloxystrobin is not considered a primary reproductive toxicant in rats.

Prothioconazole caused decreases in litter size, pup body weight gains, and neonatal spleen weights at maternally toxic doses in a multi-generation study in



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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.

Prothioconazole produced developmental effects in conjunction with maternal toxicity in oral gavage developmental studies in rats and rabbits. Developmental toxicity was not observed in rats exposed dermally to prothioconazole.

Neurotoxicity

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

Prothioconazole produced slight transient neurobehavioral effects with no correlating morphological changes in the neural tissues or skeletal muscles in acute and subchronic neurotoxicity screening studies in rats. Prothioconazole is not neurotoxic.

Mutagenicity

Trifloxystrobin was not considered mutagenic or genotoxic based on in vitro and in vivo tests.

Prothioconazole was not mutagenic or genotoxic based on the overall weight of evidence from a battery of in vitro and in vivo tests.

SECTION 12. ECOLOGICAL INFORMATION

Environmental Precautions

Do not allow to get into surface water, drains and ground water. Do not contaminate surface or ground water by cleaning equipment or disposal of wastes, including equipment wash water. Apply this product as specified on the label.

SECTION 13. DISPOSAL CONSIDERATIONS

General Disposal Guidance

Pesticide, spray mixture or rinse water that cannot be used according to label instructions may be disposed of on site or at an approved waste disposal facility. Dispose in accordance with all local, state/provincial and federal regulations.

Container Disposal

Triple rinse containers. Then offer for recycling or reconditioning or puncture and dispose of in a sanitary landfill or incineration, or if allowed by State and Local authorities, by burning. If burned, stay out of smoke. Follow advice on product label and/or leaflet.



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SECTION 14. TRANSPORT INFORMATION

DOT CLASSIFICATION:
Not regulated for Domestic Surface Shipment

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

SECTION 15. REGULATORY INFORMATION

EPA Registration No. 264-1093

US Federal Regulations

TSCA list

1,2-Propanediol 57-55-6

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

None.

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

1,2-Propanediol 57-55-6 MN, RI

Canadian Regulations

Canadian Domestic Substance List

1,2-Propanediol 57-55-6

Environmental

CERCLA

None.

Clean Water Section 307 Priority Pollutants

None.

Safe Drinking Water Act Maximum Contaminant Levels

None.



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SECTION 16. OTHER INFORMATION

NFPA 704 (National Fire Protection Association):

Health - 1 Flammability - 1 Reactivity - 0 Others - none

0 = minimal hazard, 1 = slight hazard, 2 = moderate hazard, 3 = severe hazard, 4 = extreme hazard

Reason to Revise: New Material Safety Data Sheet.

Revision Date: 12/02/2008

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