

### STRATEGO PRO® FUNGICIDE

Version 4.0 / CDN Revision Date: 06/24/2020 Print Date: 06/25/2020

# SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

**Product identifier** 

Trade name STRATEGO PRO® FUNGICIDE

**Product code (UVP)** 05907454, 81684685

**SDS Number** 102000010777

PCP Registration No. 31436

Relevant identified uses of the substance or mixture and uses advised against

**Use** Fungicide

**Restrictions on use**See product label for restrictions.

Information on supplier

Supplier Bayer CropScience Inc

#200, 160 Quarry Park Blvd, SE Calgary, Alberta T2C 3G3

Canada

Responsible Department Email: SDSINFO.BCS-NA@bayer.com

Emergency telephone no.

Emergency Telephone Number (24hr/ 7 days) 1-800-334-7577

Product Information Telephone Number

1-888-283-6847

#### **SECTION 2: HAZARDS IDENTIFICATION**

## Classified in accordance with Part 2 of the Hazardous Products Regulations

Skin sensitisation: Category 1

Reproductive toxicity: Effects on or via lactation

### Labelling in accordance with Part 3 of the Hazardous Products Regulations



Signal word: Warning

### **Hazard statements**

May cause an allergic skin reaction. May cause harm to breast-fed children.



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### **Precautionary statements**

Do not breathe mist or vapours.

Contaminated work clothing should not be allowed out of the workplace.

Wear protective gloves.

Obtain special instructions before use.

Avoid contact during pregnancy/ while nursing.

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

IF ON SKIN: Wash with plenty of water/ soap.

If skin irritation or rash occurs: Get medical advice/ attention.

Specific treatment (see supplemental first aid instructions on this label).

Wash contaminated clothing before reuse.

Dispose of contents/container in accordance with local regulation.

### **Hazards Not Otherwise Classified (HNOC)**

No physical hazards not otherwise classified. No health hazards not otherwise classified.

#### **SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

Hazardous Component Name	CAS-No.	Concentration % by weight	
Trifloxystrobin	141517-21-7	13.7	
Prothioconazole	178928-70-6	16.0	
Fatty alcohol polyglycol ether	61791-13-7	7.5	

#### **SECTION 4: FIRST AID MEASURES**

#### Description of first aid measures

General advice When possible, have the product container or label with you when

calling a poison control center or doctor or going for treatment.

**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.

**Skin contact** 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.

**Eye contact** 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.

**Ingestion** Call a physician or poison control center immediately. DO NOT induce

vomiting unless directed to do so by a physician or poison control center. Rinse out mouth and give water in small sips to drink. Never give anything by mouth to an unconscious person. Do not leave victim

unattended.



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Most important symptoms and effects, both acute and delayed

**Symptoms** To date no symptoms are known.

Indication of any immediate medical attention and special treatment needed

**Treatment** Appropriate supportive and symptomatic treatment as indicated by the

patient's condition is recommended.

**SECTION 5: FIREFIGHTING MEASURES** 

**Extinguishing media** 

**Suitable** Use water spray, alcohol-resistant foam, dry chemical or carbon

dioxide.

**Unsuitable** High volume water jet

Special hazards arising from the substance or

mixture

In the event of fire the following may be released:, Hydrogen cyanide (hydrocyanic acid), Hydrogen fluoride, Carbon monoxide (CO), Carbon

dioxide (CO2), Sulphur oxides, Nitrogen oxides (NOx)

Advice for firefighters

Special protective

equipment for firefighters

Firefighters should wear NIOSH approved self-contained breathing

apparatus and full protective clothing.

Further information Keep out of smoke. Fight fire from upwind position. Cool closed

containers exposed to fire with water spray. Do not allow run-off from

fire fighting to enter drains or water courses.

Flash point > 100 °C

No flash point - Determination conducted up to the boiling point.

Auto-ignition temperature

385 °C / 725 °F

Lower explosion limit

No data available

**Upper explosion limit** 

No data available

Explosivity

Not explosive

92/69/EEC, A.14 / OECD 113



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#### **SECTION 6: ACCIDENTAL RELEASE MEASURES**

Personal precautions, protective equipment and emergency procedures

**Precautions** Keep unauthorized people away. Isolate hazard area. Avoid contact

with spilled product or contaminated surfaces.

Methods and materials for containment and cleaning up

**Methods for cleaning up** Soak up with inert absorbent material (e.g. sand, silica gel, acid

binder, universal binder, sawdust). 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. If the product is accidentally

spilled, do not allow to enter soil, waterways or waste water canal.

**Reference to other sections** 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**

Precautions for safe handling

**Advice on safe handling**Use only in area provided with appropriate exhaust ventilation. Handle

and open container in a manner as to prevent spillage.

**Hygiene measures** 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. Remove soiled clothing immediately and clean thoroughly before using again. Wash thoroughly and put on clean

clothing.

Conditions for safe storage, including any incompatibilities

Requirements for storage

areas and containers

Store in original container. Keep containers tightly closed in a dry, cool and well-ventilated place. Store in a place accessible by authorized

persons only. Keep away from direct sunlight.

**Advice on common storage** Keep away from food, drink and animal feedingstuffs.

#### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

#### **Control parameters**

Components	CAS-No.	Control parameters	Update	Basis
Trifloxystrobin	141517-21-7	2.7 mg/m3 (SK-SEN)		OES BCS*
Prothioconazole	178928-70-6	1.4 mg/m3		OES BCS*



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(SK-ABS)

\*OES BCS: Internal Bayer AG, Crop Science Division "Occupational Exposure Standard"

#### **Exposure controls**

### Personal protective equipment

In normal use and handling conditions please refer to the label and/or leaflet. In all other cases the following recommendations would apply.

**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.

Hand protection Chemical resistant nitrile rubber gloves

**Eye protection** Safety glasses with side-shields

**Skin and body protection** Wear long-sleeved shirt and long pants and shoes plus socks.

General protective measures 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.

#### **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Appearance white to beige Physical State suspension

Odor weak characteristic
Odour Threshold No data available

**pH** 5.5 - 7.0 (100 %) (23 °C)

Viscosity, kinematicNo data availableVapor PressureNo data availableVapor Density (Air = 1)No data available

**Density** ca. 1.10 g/cm<sup>3</sup> (20 °C)

Evaporation rateNo data availableBoiling PointNo data availableMelting / Freezing PointNo data available

Water solubility dispersible

Minimum Ignition Energy No data available

**Decomposition** Stable under normal conditions. **temperature** 



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Self-accelarating

No data available

decomposition temperature

(SADT)

Partition coefficient: n-

octanol/water

Not applicable

Viscosity 350 - 500 mPa.s (20 °C) Velocity gradient 20 /s

150 - 250 mPa.s (20 °C) Velocity gradient 100 /s

Flammability No data available

Flash point > 100 °C

No flash point - Determination conducted up to the boiling point.

Auto-ignition temperature

385 °C / 725 °F

Lower explosion limit

No data available

**Upper explosion limit** 

No data available

**Explosivity** Not explosive

92/69/EEC, A.14 / OECD 113

Particle size

No data available

Other information

Further safety related physical-chemical data are not known.

#### **SECTION 10: STABILITY AND REACTIVITY**

Reactivity

**Thermal decomposition** Stable under normal conditions.

**Chemical stability** Stable under recommended storage conditions.

Possibility of hazardous

reactions

No hazardous reactions when stored and handled according to

prescribed instructions.

**Conditions to avoid** Extremes of temperature and direct sunlight.

**Incompatible materials**No incompatible materials known.

**Hazardous decomposition** 

products

No decomposition products expected under normal conditions of use.

#### **SECTION 11: TOXICOLOGICAL INFORMATION**

**Exposure routes** Eye contact, Ingestion, Inhalation, Skin contact

**Immediate Effects** 

**Eye** Moderate eye irritation.



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**Skin** May cause slight irritation. Harmful if absorbed through skin.

IngestionHarmful if swallowed.InhalationHarmful if inhaled.

Information on toxicological effects

Acute oral toxicity LD50 (Rat) >= 5,000 mg/kgAcute inhalation toxicity LC50 (Rat) > 2.189 mg/l

Exposure time: 4 h

Highest attainable concentration.

Acute dermal toxicity LD50 (Rat) > 4,000 mg/kg

Skin corrosion/irritation No skin irritation (Rabbit)

Serious eye damage/eye slight irritation (Rabbit)

irritation

Respiratory or skin Skin: Sensitising (Guinea pig)

sensitisation OECD Test Guideline 406, Magnusson & Kligman test

Assessment STOT Specific target organ toxicity - single exposure

Trifloxystrobin: Based on available data, the classification criteria are not met. Prothioconazole: Based on available data, the classification criteria are not met.

#### Assessment STOT Specific target organ toxicity - repeated exposure

Trifloxystrobin did not cause specific target organ toxicity in experimental animal studies. Prothioconazole did not cause specific target organ toxicity in experimental animal studies.

#### **Assessment mutagenicity**

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

#### Assessment carcinogenicity

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

#### **ACGIH**

None.

NTP

None.

**IARC** 

None.

**OSHA** 

None.

#### Assessment toxicity to reproduction



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producing systemic toxicity in adult rats.

Prothioconazole caused reproduction toxicity in a two-generation study in rats only at dose levels also toxic to the parent animals. The reproduction toxicity seen with Prothioconazole is related to parental toxicity.

#### Assessment developmental toxicity

Trifloxystrobin caused developmental toxicity only at dose levels toxic to the dams. The developmental effects seen with Trifloxystrobin are related to maternal toxicity.

Prothioconazole caused developmental toxicity only at dose levels toxic to the dams. The developmental effects seen with Prothioconazole are related to maternal toxicity.

### **Aspiration hazard**

Based on available data, the classification criteria are not met.

#### **Further information**

Only acute toxicity studies have been performed on the formulated product.

The non-acute information pertains to the active ingredient(s).

#### **SECTION 12: ECOLOGICAL INFORMATION**

**Toxicity to fish** LC50 (Oncorhynchus mykiss (rainbow trout)) 0.125 mg/l

Exposure time: 96 h

**Toxicity to aquatic** EC50 (Daphnia magna (Water flea)) 0.126 mg/l

**invertebrates** Exposure time: 48 h

LC50 (Mysidopsis bahia (mysid shrimp)) 0.00862 mg/l

Exposure time: 96 h

The value mentioned relates to the active ingredient trifloxystrobin.

**Toxicity to aquatic plants** IC50 (Raphidocelis subcapitata (freshwater green alga)) 0.68 mg/l

Growth rate; Exposure time: 72 h

ErC50 (Skeletonema costatum) 0.03278 mg/l

Exposure time: 72 h

The value mentioned relates to the active ingredient prothioconazole.

EC10 (Skeletonema costatum) 0.01427 mg/l

Growth rate; Exposure time: 72 h

The value mentioned relates to the active ingredient prothioconazole.

EC10 (Desmodesmus subspicatus (green algae)) 0.0025 mg/l

Growth rate; Exposure time: 72 h

The value mentioned relates to the active ingredient trifloxystrobin.

**Biodegradability** Trifloxystrobin:

Not rapidly biodegradable

Prothioconazole:

Not rapidly biodegradable

Koc Trifloxystrobin: Koc: 2377

Prothioconazole: Koc: 1765



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**Bioaccumulation** Trifloxystrobin: Bioconcentration factor (BCF) 431

Does not bioaccumulate.

Prothioconazole: Bioconcentration factor (BCF) 19

Does not bioaccumulate.

**Mobility in soil** Trifloxystrobin: Slightly mobile in soils

Prothioconazole: Slightly mobile in soils

Additional ecological

information

No other effects to be mentioned.

**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 allow product to enter streams, sewers or other waterways. 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**

#### Waste treatment methods

**Product** Do not contaminate water, food, or feed by disposal.

Dispose in accordance with all local, state/provincial and federal

regulations.

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.

Follow advice on product label and/or leaflet.

Contaminated packaging Consult state and local regulations regarding the proper disposal of

container.

Follow advice on product label and/or leaflet.

#### **SECTION 14: TRANSPORT INFORMATION**

**TDG** 

UN number 3082
Labels 9
Packaging group III

Marine pollutant Marine pollutant

Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S.

(TRIFLOXYSTROBIN, PROTHIOCONAZOLE)

**49CFR** Not dangerous goods / not hazardous material

**IMDG** 



10/12

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UN number 3082
Class 9
Packaging group III
Marine pollutant YES

Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S.

(TRIFLOXYSTROBIN, PROTHIOCONAZOLE SOLUTION)

IATA

UN number 3082
Class 9
Packaging group III
Environm. Hazardous Mark YES

Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S.

(TRIFLOXYSTROBIN, PROTHIOCONAZOLE SOLUTION)

This transportation information is not intended to convey all specific regulatory information relating to this product. It does not address regulatory variations due to package size or special transportation requirements.

Further Information Exempt from regulation when transported by road or rail, in

accordance with TDG Regulations 1.45.1.

This exemption provides that this product does not require dangerous goods shipping documentation or safety marks

when transported on land by road or rail.

Freight Classification: INSECTICIDES OR FUNGICIDES, N.O.I., OTHER THAN

**POISON** 

#### **SECTION 15: REGULATORY INFORMATION**

PCP Registration No. 31436

### **PMRA Information:**

Read the label, authorized under the Pest Control Products Act, prior to using or handling the pest control product.

This chemical is a pest control product regulated by Health Canada Pest Management Regulatory Agency and is subject to certain labelling requirements under the Pest Control Products Act. These requirements differ from the classification criteria and hazard information required for GHS-consistent safety data sheets. The following is the hazard information required on the pest control product label:



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Signal word: Caution!

**Hazard statements:** Moderate eye irritation.

Harmful if swallowed, inhaled or absorbed through the skin. Prolonged or frequently repeated skin contact may cause allergic

reactions in some individuals.

There are Canada-specific environmental requirements for handling, use, and disposal of this pest control product that are indicated on the label.

#### **SECTION 16: OTHER INFORMATION**

### Abbreviations and acronyms

49CFR Code of Federal Regulations, Title 49
ACGIH US. ACGIH Threshold Limit Values

ATE Acute toxicity estimate

CAS-Nr. Chemical Abstracts Service number

CERCLA Comprehensive Environmental Response, Compensation, and Liability Act

EINECS European inventory of existing commercial substances

ELINCS European list of notified chemical substances IARC International Agency for Research on Cancer IATA International Air Transport Association IMDG International Maritime Dangerous Goods

N.O.S. Not otherwise specified

NTP US. National Toxicology Program (NTP) Report on Carcinogens
OECD Organization for Economic Co-operation and Development

TDG Transportation of Dangerous Goods

TWA Time weighted average

UN United Nations

WHO World health organisation

## NFPA 704 (National Fire Protection Association):

Health - 2 Flammability - 1 Instability - 0 Others - none

#### HMIS (Hazardous Materials Identification System, based on the Third Edition Ratings Guide)

Health - 2 Flammability - 1 Physical Hazard - 0 PPE -

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

**Reason for Revision:** The following sections have been revised: Section 2: Hazards Identification. Section 3: Composition / Information on Ingredients. Section 11: Toxicological Information. Section 12. Ecological information. Reviewed and updated for general editorial purposes.

Prepared by the HSE Department of Bayer CropScience Inc. (306)-721-0310.

**Revision Date: 06/24/2020** 

This information is provided in good faith but without express or implied warranty. The customer assumes all responsibility for safety and use not in accordance with label instructions. The product names are



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