

1/13

PROSARO® PRO 400 SC FUNGICIDE

Version 1.0 / USA Revision Date: 10/11/2024 102000062251 Print Date: 10/18/2024

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

Product identifier

Trade name PROSARO® PRO 400 SC FUNGICIDE

Product code (UVP) 90316766

SDS Number 102000062251

EPA Registration No. 264-1209

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

Use Fungicide

Restrictions on useSee product label for restrictions.

Information on supplier

Supplier Bayer CropScience LP

800 North Lindbergh Blvd. St. Louis, MO 63167

USA

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

1-866-99BAYER (1-866-992-2937)

SECTION 2: HAZARDS IDENTIFICATION

Classification in accordance with regulation HCS 29CFR §1910.1200

Acute toxicity(Inhalation): Category 4
Reproductive toxicity: Category 2

Labelling in accordance with regulation HCS 29CFR §1910.1200





Signal word: Warning Hazard statements



PROSARO® PRO 400 SC FUNGICIDE

Version 1.0 / USA Revision Date: 10/11/2024 102000062251 Print Date: 10/18/2024

Harmful if inhaled.

Suspected of damaging fertility or the unborn child.

Precautionary statements

Avoid breathing mist/ spray.

Use only outdoors or in a well-ventilated area.

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Wear protective gloves/ protective clothing/ eye protection/ face protection.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Call a POISON CENTER/doctor/physician if you feel unwell.

IF exposed or concerned: Get medical advice/ attention.

Store locked up.

Protect from sunlight.

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	
Prothioconazole	178928-70-6	17.39	
Tebuconazole	107534-96-3	8.70	
Fluopyram	658066-35-4	8.70	

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.



PROSARO® PRO 400 SC FUNGICIDE

Version 1.0 / USA Revision Date: 10/11/2024 102000062251 Print Date: 10/18/2024

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.

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, Hydrogen chloride (HCI),

Carbon monoxide (CO), Carbon dioxide (CO2), Nitrogen oxides (NOx),

Sulphur oxides

Advice for firefighters

Special protective

equipment for firefighters

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.

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

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

fire fighting to enter drains or water courses.

Specific hazards from the substance or mixture which can increase the fire

>100 °C / 212 °F Flash point

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

Test conducted with a similar formulation.

436 °C / 816.8 °F **Auto-ignition temperature**

Test conducted with a similar formulation.

Lower explosion limit No data available **Upper explosion limit** No data available **Explosivity** Not explosive



PROSARO® PRO 400 SC FUNGICIDE

Version 1.0 / USA Revision Date: 10/11/2024 102000062251 Print Date: 10/18/2024

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 handlingUse 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 a cool, dry place and in such a manner as to prevent cross contamination with other crop protection products, fertilizers, food, and feed. Store in original container and out of the reach of children, preferably in a locked storage area. 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
Prothioconazole	178928-70-6	1.4 mg/m3		OES BCS*



PROSARO® PRO 400 SC FUNGICIDE

Version 1.0 / USA Revision Date: 10/11/2024 102000062251 Print Date: 10/18/2024

		(SK-ABS)	
Fluopyram	658066-35-4	0.34 mg/m3 (TWA)	OES BCS*
Tebuconazole	107534-96-3	0.2 mg/m3 (SK-ABS)	OES BCS*

^{*}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 gloves (barrier laminate, butyl rubber, nitrile

rubber or Viton)

Eye protection Tightly fitting safety goggles

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

Information on basic physical and chemical properties

Form Liquid

Colourwhite to beigeOdourcharacteristicOdour ThresholdNo data available

pH 5.0 - 7.5 (100 %) (23 °C)

Melting point/rangeNo data availableBoiling PointNo data availableFlash point> 100 °C / 212 °F

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

conducted with a similar formulation.

Flammability No data available

Auto-ignition temperature 436 °C / 816.8 °F

Test conducted with a similar formulation.



PROSARO® PRO 400 SC FUNGICIDE

Version 1.0 / USA Revision Date: 10/11/2024 102000062251 Print Date: 10/18/2024

Thermal decomposition Stable under normal conditions.

Minimum ignition energy No data available
Self-accelarating No data available

decomposition temperature (SADT)

(SADT)

Upper explosion limitNo data availableLower explosion limitNo data availableVapour pressureNo data availableEvaporation rateNo data availableRelative vapour densityNo data availableRelative densityNo data available

Density ca. 1.15 g/cm³ (20 °C)

Water solubility No data available

Partition coefficient: n-

octanol/water

Prothioconazole: log Pow: 3.82 (20 °C) (pH 7)

Fluopyram: log Pow: 3.3 Tebuconazole: log Pow: 3.7

Viscosity, dynamic 300 - 500 mPa.s (20 °C)

Velocity gradient 20 /s

Viscosity, kinematic 278.4 mm²/s (20 °C) Shear rate of 20/sec

110.4 mm²/s (20 °C) Shear rate of 100/sec 4.34 mm²/s (40 °C) Shear rate of 20/sec 0.9 mm²/s (40 °C) Shear rate of 100/sec

Surface tension 36 mN/m (25 °C)

Determined in the undiluted form.

43 mN/m (20 °C)

Determined as a 0,1% solution in distilled water (1 g/l).

Oxidizing properties No oxidizing properties

Explosivity Not explosive

Other information Further safety related physical-chemical data are not known.



PROSARO® PRO 400 SC FUNGICIDE

Version 1.0 / USA Revision Date: 10/11/2024 102000062251 Print Date: 10/18/2024

Reactivity 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 Skin contact, Eye contact, Inhalation, Ingestion

Immediate Effects

Eye May cause temporary eye irritation.

Skin May be harmful in contact with skin.

Ingestion May be harmful if swallowed.

Inhalation Harmful if inhaled.

Information on toxicological effects

Acute oral toxicity LD50 (Mouse) > 2,000 mg/kg

Test conducted with a similar formulation.

Acute inhalation toxicity LC50 (Rat) > 2.22 mg/l

highest concentration tested

No deaths

Test conducted with a similar formulation.

Acute dermal toxicity

Information given is based on data obtained from similar substances. Dermal toxicity was assessed based on the result of the oral toxicity

study.

Dermal toxicity study has been waived by competent regulatory

authority.

Skin corrosion/irritation Slight irritant effect - does not require labelling. (Rabbit)

Test conducted with a similar formulation.

Serious eye damage/eye

irritation

Slight irritant effect - does not require labelling. (Rabbit)

Test conducted with a similar formulation.

Respiratory or skin

sensitisation

Skin: Non-sensitizing. (Mouse)

OECD Test Guideline 429, local lymph node assay (LLNA)

Test conducted with a similar formulation.

Assessment STOT Specific target organ toxicity - single exposure



PROSARO® PRO 400 SC FUNGICIDE

Version 1.0 / USA Revision Date: 10/11/2024 102000062251 Print Date: 10/18/2024

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

Assessment STOT Specific target organ toxicity - repeated exposure

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

Assessment mutagenicity

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

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

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

Assessment carcinogenicity

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

Fluopyram caused at high dose levels an increased incidence of tumours in rats in the following organ(s): Liver.

Fluopyram caused at high dose levels an increased incidence of tumours in mice in the following organ(s): Thyroid.

The tumours seen with Fluopyram were caused through a non-genotoxic mechanism, which is not relevant at low doses. The mechanism that triggers these tumours is not relevant to humans. Tebuconazole caused at high dose levels an increased incidence of tumours in mice in the following organ(s): Liver. The mechanism of tumour formation is not considered to be relevant to man.

ACGIH
None.
NTP
None.
IARC
None.
Assessment toxicity to reproducti

Assessment toxicity to reproduction

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.

Fluopyram 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 Fluopyram is related to parental toxicity. Tebuconazole 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 Tebuconazole is related to parental toxicity.

Assessment developmental toxicity

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

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

Tebuconazole caused developmental toxicity only at dose levels toxic to the dams. Tebuconazole



PROSARO® PRO 400 SC FUNGICIDE

Version 1.0 / USA Revision Date: 10/11/2024 102000062251 Print Date: 10/18/2024

caused an increased incidence of post implantation losses, an increased incidence of non-specific malformations.

Aspiration hazard

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

Further information

The toxicological data refer to a similar formulation.

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

No further toxicological information is available.

SECTION 12: ECOLOGICAL INFORMATION

Toxicity to fish LC50 (Oncorhynchus mykiss (rainbow trout)) > 2 mg/l

Exposure time: 96 h

The value mentioned relates to the active ingredient fluopyram. No acute toxicity was observed at its limit of water solubility.

LC50 (Oncorhynchus mykiss (rainbow trout)) 1.83 mg/l

Exposure time: 96 h

The value mentioned relates to the active ingredient prothioconazole.

LC50 (Oncorhynchus mykiss (rainbow trout)) 4.4 mg/l

Exposure time: 96 h

The value mentioned relates to the active ingredient tebuconazole.

Toxicity to aquatic invertebrates

EC50 (Daphnia magna (Water flea)) > 20 mg/l

Exposure time: 48 h

The value mentioned relates to the active ingredient fluopyram. No acute toxicity was observed at its limit of water solubility.

LC50 (Daphnia magna (Water flea)) 1.3 mg/l

Exposure time: 48 h

The value mentioned relates to the active ingredient prothioconazole.

EC50 (Daphnia magna (Water flea)) 2.79 mg/l

Exposure time: 48 h

The value mentioned relates to the active ingredient tebuconazole.

Chronic toxicity to aquatic

invertebrates

NOEC (Daphnia (water flea)): 0.01 mg/l

Exposure time: 21 d

The value mentioned relates to the active ingredient tebuconazole.

Toxicity to aquatic plants EC50 (Raphidocelis subcapitata (freshwater green alga)) 8.9 mg/l

Growth rate; Exposure time: 72 h

The value mentioned relates to the active ingredient fluopyram.

ErC50 (Skeletonema costatum) 0.03278 mg/l

Exposure time: 72 h

The value mentioned relates to the active ingredient prothioconazole.



PROSARO® PRO 400 SC FUNGICIDE

Version 1.0 / USA Revision Date: 10/11/2024 102000062251 Print Date: 10/18/2024

EC10 (Skeletonema costatum) 0.01427 mg/l

Growth rate; Exposure time: 72 h

The value mentioned relates to the active ingredient prothioconazole.

(Lemna gibba (gibbous duckweed)) 0.237 mg/l

Growth rate; Exposure time: 7 d

The value mentioned relates to the active ingredient tebuconazole.

Biodegradability Prothioconazole:

Not rapidly biodegradable

Fluopyram:

Not rapidly biodegradable

Tebuconazole:

Not rapidly biodegradable

Koc Prothioconazole: Koc: 1765

Fluopyram: Koc: 279 Tebuconazole: Koc: 769

Bioaccumulation Prothioconazole: Bioconcentration factor (BCF) 19

Does not bioaccumulate.

Fluopyram: Bioconcentration factor (BCF) 18

Does not bioaccumulate.

Tebuconazole: Bioconcentration factor (BCF) 35 - 59

Does not bioaccumulate.

Mobility in soil Prothioconazole: Slightly mobile in soils

Fluopyram: Moderately mobile in soils Tebuconazole: Slightly mobile in soils

Results of PBT and vPvB assessment

PBT and vPvB assessment Prothioconazole: This substance is not considered to be persistent,

bioaccumulative and toxic (PBT). This substance is not considered to be

very persistent and very bioaccumulative (vPvB).

Fluopyram: This substance is not considered to be persistent,

bioaccumulative and toxic (PBT). This substance is not considered to be

very persistent and very bioaccumulative (vPvB).

Tebuconazole: This substance is not considered to be persistent,

bioaccumulative and toxic (PBT). This substance is not considered to be

very persistent and very bioaccumulative (vPvB).

Additional ecological

information

No other effects to be mentioned.

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.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods



PROSARO® PRO 400 SC FUNGICIDE

Version 1.0 / USA Revision Date: 10/11/2024 102000062251 Print Date: 10/18/2024

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

regulations.

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

container.

Follow advice on product label and/or leaflet.

RCRA Information Characterization and proper disposal of this material as a special or

hazardous waste is dependent upon Federal, State and local laws and

are the user's responsibility. RCRA classification may apply.

SECTION 14: TRANSPORT INFORMATION

49CFR Not dangerous goods / not hazardous material

IMDG

UN number 3082
Class 9
Packaging group III
Marine pollutant YES

Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

NOS

(TEBUCONAZOLE, 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.

(TEBUCONAZOLE, 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.

SECTION 15: REGULATORY INFORMATION

EPA Registration No. 264-1209

US Federal Regulations

TSCA list

Water 7732-18-5
Glycerine 56-81-5
Polyethylene-polypropylene copolymer 9003-11-6



12/13

PROSARO® PRO 400 SC FUNGICIDE

Version 1.0 / USA Revision Date: 10/11/2024 102000062251 Print Date: 10/18/2024

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

No export notification needs to be made.

SARA Title III - Section 302 - Notification and Information

Not applicable.

SARA Title III - Section 313 - Toxic Chemical Release Reporting

None.

US States Regulatory Reporting

CA Prop65

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

US State Right-To-Know Ingredients

Glycerine 56-81-5 MN, RI

Environmental

CERCLA None.

Clean Water Section 307(a)(1)

None

Safe Drinking Water Act Maximum Contaminant Levels

Yes

Tebuconazole 107534-96-3

EPA/FIFRA Information:

This chemical is a pesticide product regulated by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information required on the pesticide label:

Signal word: Caution!

Hazard statements: Harmful if swallowed, inhaled or absorbed through the skin.

Causes moderate eye irritation.

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



13/13

PROSARO® PRO 400 SC FUNGICIDE

Version 1.0 / USA Revision Date: 10/11/2024 102000062251 Print Date: 10/18/2024

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 - 0 Instability - 0 Others - none

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

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

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

* = chronic health hazard

Reason for Revision: New Safety Data Sheet.

Revision Date: 10/11/2024

Changes since the last version are highlighted in the margin. This version replaces all previous versions.

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 registered trademarks of Bayer.