

SAFETY DATA SHEET



EMESTO PRO

Version 1.0 / CDN
102000059580

1/12
Revision Date: 12/15/2022
Print Date: 12/16/2022

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

Product identifier

Trade name	EMESTO PRO
Product code (UVP)	88878205
SDS Number	102000059580
PCP Registration No.	33593

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

Use	Fungicide, Seed treatment
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

Labelling in accordance with Part 3 of the Hazardous Products Regulations



Signal word: Warning

Hazard statements

May cause an allergic skin reaction.

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Precautionary statements

Avoid breathing mist/ spray.
Contaminated work clothing should not be allowed out of the workplace.
Wear protective gloves.
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.
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	8.7
3-Hydroxy-2'-methyl-2-naphthanilide	135-61-5	0.2

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	Wash off immediately with plenty of water for at least 15 minutes. Take off contaminated clothing and shoes immediately. 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. 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.

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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 Dangerous gases are evolved in the event of a fire.

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.

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.

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

Flash point > 100 °C
No flash point - Determination conducted up to the boiling point.

Auto-ignition temperature 465 °C / 869 °F

Lower explosion limit No data available

Upper explosion limit No data available

Explosivity Not explosive
92/69/EEC, A.14 / OECD 113
Not explosive

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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. Do not allow product to contact non-target plants.

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 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. Protect from freezing. 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
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Prothioconazole	178928-70-6	1.4 mg/m ³ (SK-ABS)		OES BCS*
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*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

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

Information on basic physical and chemical properties

Form	suspension
Colour	red
Odour	weak, characteristic
Odour Threshold	No data available
pH	5.0 - 6.0 (100 %) (23 °C)
Melting point/range	No data available
Boiling Point	No data available
Flash point	> 100 °C No flash point - Determination conducted up to the boiling point.
Flammability	No data available
Auto-ignition temperature	465 °C
Thermal decomposition	No data available
Ignition temperature	425 °C
Minimum ignition energy	Not applicable
Self-accelerating	No data available

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decomposition temperature (SADT)

Upper explosion limit	No data available
Lower explosion limit	No data available
Vapour pressure	No data available
Evaporation rate	No data available
Relative vapour density	No data available
Relative density	No data available
Density	ca. 1.15 g/cm ³ (20 °C)
Water solubility	miscible
Partition coefficient: n-octanol/water	Prothioconazole: log Pow: 3.82 (20 °C) (pH 7)
Viscosity, dynamic	No data available
Viscosity, kinematic	No data available
Impact sensitivity	Not impact sensitive.
Oxidizing properties	No oxidizing properties
Explosivity	Not explosive 92/69/EEC, A.14 / OECD 113 Not explosive
Other information	Further safety related physical-chemical data are not known.

SECTION 10: STABILITY AND REACTIVITY

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.

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SECTION 11: TOXICOLOGICAL INFORMATION

Exposure routes	Ingestion, Inhalation, Eye contact, Skin contact
Immediate Effects	
Eye	Not expected to produce significant adverse effects when recommended use instructions are followed.
Skin	May cause sensitisation by skin contact. May be harmful in contact with skin.
Ingestion	May be harmful if swallowed.
Inhalation	Not expected to produce significant adverse effects when recommended use instructions are followed.
Information on toxicological effects	
Acute oral toxicity	LD50 (Rat) > 2,500 mg/kg
Acute inhalation toxicity	LC50 (male/female combined Rat) > 2.735 mg/l Determined in the form of a respirable aerosol. Highest attainable concentration. No deaths
Acute dermal toxicity	LD50 (Rat) > 4,000 mg/kg
Skin corrosion/irritation	No skin irritation (Rabbit)
Serious eye damage/eye irritation	No eye irritation (Rabbit)
Respiratory or skin sensitisation	Skin: Sensitising (Guinea pig) OECD Test Guideline 406, Magnusson & Kligman test

Assessment STOT Specific target organ toxicity – single exposure

Prothioconazole: 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.

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.

Assessment carcinogenicity

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

ACGIH

None.

NTP

None.

IARC

None.

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ACGIH

None.

NTP

None.

IARC

None.

OSHA

None.

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.

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.

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)) 16.4 mg/l
Exposure time: 96 h

NOEC (Oncorhynchus mykiss (rainbow trout)) 2.23 mg/l
Exposure time: 96 h

LC50 (Oncorhynchus mykiss (rainbow trout)) 1.83 mg/l
Exposure time: 96 h

The value mentioned relates to the active ingredient prothioconazole.

Toxicity to aquatic invertebrates

EC50 (Daphnia magna (Water flea)) 12.2 mg/l
Exposure time: 48 h

EC50 (Daphnia magna (Water flea)) 1.3 mg/l
Exposure time: 48 h

The value mentioned relates to the active ingredient prothioconazole.

Toxicity to aquatic plants

ErC50 (Raphidocelis subcapitata (freshwater green alga)) 18.6 mg/l

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	Exposure time: 72 h
	NOEC (Raphidocelis subcapitata (freshwater green alga)) 2.24 mg/l Exposure time: 72 h
	EC50 (Raphidocelis subcapitata (freshwater green alga)) 2.18 mg/l Exposure time: 72 h The value mentioned relates to the active ingredient prothioconazole.
	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.
Biodegradability	Prothioconazole: Not rapidly biodegradable
Koc	Prothioconazole: Koc: 1765
Bioaccumulation	Prothioconazole: Bioconcentration factor (BCF) 19 Does not bioaccumulate.
Mobility in soil	Prothioconazole: 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).
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

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.

SECTION 14: TRANSPORT INFORMATION

TDG

UN number	3082
Labels	9
Packaging group	III
Marine pollutant	Marine pollutant

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Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,
N.O.S.
(PROTHIOCONAZOLE)

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,
N.O.S.
(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.
(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.

SECTION 15: REGULATORY INFORMATION

PCP Registration No. 33593

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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Hazard statements: Harmful if swallowed or absorbed through skin.
Potential skin sensitizer.
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 Fourth 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,
* = chronic health hazard

Reason for Revision: New Safety Data Sheet.

Revision Date: 12/15/2022

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

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