

SAFETY DATA SHEET



RAXIL RISE

Version 1.0 / CDN
102000063504

1/14

Revision Date: 09/26/2024
Print Date: 09/30/2024

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

Product identifier

Trade name	RAXIL RISE
Product code (UVP)	91110010
SDS Number	102000063504

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

Use	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
Reproductive toxicity: Category 2

Labelling in accordance with Part 3 of the Hazardous Products Regulations



Signal word: Warning

Hazard statements

Suspected of damaging fertility or the unborn child.

Precautionary statements

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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 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
Penflufen	494793-67-8	1.45
Prothioconazole	178928-70-6	1.45
Metalaxyl	57837-19-1	0.58
Tebuconazole	107534-96-3	0.29

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.

Indication of any immediate medical attention and special treatment needed

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Treatment	Appropriate supportive and symptomatic treatment as indicated by the patient's condition is recommended.
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SECTION 5: FIREFIGHTING MEASURES

Extinguishing media

Suitable	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
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Unsuitable	High volume water jet
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Special hazards arising from the substance or mixture	Dangerous gases are evolved in the event of a fire.
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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.
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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.
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Specific hazards from the substance or mixture which can increase the fire

Flash point	No flash point - Determination conducted up to the boiling point., Test conducted with a similar formulation.
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Auto-ignition temperature	No data available
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Lower explosion limit	No data available
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Upper explosion limit	No data available
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Explosivity	No data available
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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 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
Penflufen	494793-67-8	1.1 mg/m3		OES BCS*

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		(TWA)		
Prothioconazole	178928-70-6	1.4 mg/m ³ (SK-ABS)		OES BCS*
Tebuconazole	107534-96-3	0.2 mg/m ³ (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	suspension
Colour	red
Odour	characteristic
Odour Threshold	No data available
pH	4.0 - 6.0 (100 %) (23 °C)
Melting point/range	No data available
Boiling point/boiling range	100 °C Test conducted with a similar formulation.
Flash point	No flash point - Determination conducted up to the boiling point., Test conducted with a similar formulation.
Flammability	No data available
Auto-ignition temperature	No data available

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Thermal decomposition	No data available
Minimum ignition energy	No data available
Self-accelarating decomposition temperature (SADT)	No data available
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. 1.06 g/cm ³ (20 °C)
Water solubility	No data available
Partition coefficient: n-octanol/water	Penflufen: log Pow: 3.3 (25 °C) Prothioconazole: log Pow: 3.82 (20 °C) (pH 7) Tebuconazole: log Pow: 3.7
Viscosity, dynamic	70 - 200 mPa.s (20 °C) Velocity gradient 20 /s 40 - 100 mPa.s (20 °C) Velocity gradient 100 /s
Viscosity, kinematic	No data available
Oxidizing properties	No data available
Explosivity	No data available
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.

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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	Ingestion, Inhalation, Eye contact, Skin contact
Immediate Effects	
Eye	May cause temporary eye irritation.
Skin	May be harmful in contact with skin.
Ingestion	May be harmful if swallowed.
Inhalation	May be harmful if inhaled.
Information on toxicological effects	
Acute oral toxicity	LD50 (female Rat) > 5,000 mg/kg Test conducted with a similar formulation.
Acute inhalation toxicity	LC50 (Rat) 5.12 mg/l Test conducted with a similar formulation.
Acute dermal toxicity	Test conducted with a similar formulation. Dermal toxicity study has been waived by competent regulatory authority. Dermal toxicity was assessed based on the result of the oral toxicity study.
Skin corrosion/irritation	slight irritation (Rabbit) Test conducted with a similar formulation.
Serious eye damage/eye irritation	Moderate eye irritation. (Rabbit) Test conducted with a similar formulation.
Respiratory or skin sensitisation	Skin: Non-sensitizing. Test conducted with a similar formulation.

Assessment STOT Specific target organ toxicity – single exposure

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

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

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

Assessment mutagenicity

Penflufen 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.
Metalaxyl 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

Penflufen caused at high dose levels an increased incidence of tumours in rats in the following organ(s): ovaries, Brain, hematopoietic system. The mechanism that triggers these tumours is not relevant to humans.
Prothioconazole was not carcinogenic in lifetime feeding studies in rats and mice.
Metalaxyl was not carcinogenic in lifetime feeding studies in rats and mice.
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.

ACGIH

None.

NTP

None.

IARC

None.

OSHA

None.

Assessment toxicity to reproduction

Penflufen did not cause reproductive toxicity in a two-generation study in 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.
Metalaxyl did not cause reproductive toxicity in a multi-generation study in rats.
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

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Penflufen did not cause developmental toxicity in rats and rabbits.
Prothioconazole caused developmental toxicity only at dose levels toxic to the dams. The developmental effects seen with Prothioconazole are related to maternal toxicity.
Metalaxyl did not cause developmental toxicity in rats and rabbits.
Tebuconazole caused developmental toxicity only at dose levels toxic to the dams. Tebuconazole 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

Information given is based on data obtained from similar substances.
The non-acute information pertains to the active ingredient(s).
No further toxicological information is available.

SECTION 12: ECOLOGICAL INFORMATION

Toxicity to fish

LC50 (Cyprinus carpio (Carp)) 0.103 mg/l
Exposure time: 96 h
The value mentioned relates to the active ingredient penflufen.
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)) > 100 mg/l
Exposure time: 96 h
The value mentioned relates to the active ingredient metalaxyl.
LC50 (Oncorhynchus mykiss (rainbow trout)) 4.4 mg/l
Exposure time: 96 h
The value mentioned relates to the active ingredient tebuconazole.

Chronic toxicity to fish

Pimephales promelas (fathead minnow)
NOEC: 0.0234 mg/l
Exposure time: 35 d
The value mentioned relates to the active ingredient penflufen.

Toxicity to aquatic invertebrates

EC50 (Daphnia magna (Water flea)) > 4.66 mg/l
Exposure time: 48 h
The value mentioned relates to the active ingredient penflufen.
No acute toxicity was observed at its limit of water solubility.
EC50 (Daphnia magna (Water flea)) 1.3 mg/l
Exposure time: 48 h
The value mentioned relates to the active ingredient prothioconazole.
The value mentioned relates to the active ingredient metalaxyl.
No data available
EC50 (Daphnia magna (Water flea)) 2.79 mg/l

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	Exposure time: 48 h The value mentioned relates to the active ingredient tebuconazole.
Chronic toxicity to aquatic invertebrates	NOEC (Daphnia magna (Water flea)): 1.5 mg/l Exposure time: 21 d The value mentioned relates to the active ingredient penflufen. 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)) > 5.1 mg/l Growth rate; Exposure time: 96 h The value mentioned relates to the active ingredient penflufen. No acute toxicity was observed at its limit of water solubility. EC50 (Lemna gibba (gibbous duckweed)) > 4.7 mg/l static test; Exposure time: 7 d The value mentioned relates to the active ingredient penflufen. ErC50 (Raphidocelis subcapitata (freshwater green alga)) 2.18 mg/l Growth rate; Exposure time: 72 h The value mentioned relates to the active ingredient prothioconazole. ErC50 (Skeletonema costatum) 0.03278 mg/l Growth rate; 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. EC50 (Raphidocelis subcapitata (freshwater green alga)) 3.8 mg/l Growth rate; Exposure time: 72 h The value mentioned relates to the active ingredient tebuconazole. EC50 (Lemna gibba (gibbous duckweed)) 0.237 mg/l Growth rate; Exposure time: 7 d The value mentioned relates to the active ingredient tebuconazole.
Toxicity to bacteria	EC50 (activated sludge) > 1,000 mg/l Exposure time: 3 h The value mentioned relates to the active ingredient penflufen. The value mentioned relates to the active ingredient prothioconazole. No data available
Biodegradability	Penflufen: Not rapidly biodegradable Prothioconazole: Not rapidly biodegradable Metalaxyl: Not rapidly biodegradable Tebuconazole: Not rapidly biodegradable

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Koc	Penflufen: Koc: 280 Prothioconazole: Koc: 1765 Metalaxyl: Koc: 163 Tebuconazole: Koc: 769
Bioaccumulation	Penflufen: Bioconcentration factor (BCF) 142 Does not bioaccumulate. Prothioconazole: Bioconcentration factor (BCF) 19 Does not bioaccumulate. Metalaxyl: Bioconcentration factor (BCF) < 7 Does not bioaccumulate. Tebuconazole: Bioconcentration factor (BCF) 35 - 59 Does not bioaccumulate.
Mobility in soil	Penflufen: Moderately mobile in soils Prothioconazole: Slightly mobile in soils Metalaxyl: Moderately mobile in soils Tebuconazole: Slightly mobile in soils
Results of PBT and vPvB assessment	
PBT and vPvB assessment	Penflufen: 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). 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). Metalaxyl: 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

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.

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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. (TEBUCONAZOLE, 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. (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.

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

If more information is required, call the product information number listed in Section 1.

PMRA Information:

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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:

Signal word: Caution!

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

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

ATE	Acute toxicity estimate
TWA	Time weighted average
NTP	US. National Toxicology Program (NTP) Report on Carcinogens
ACGIH	US. ACGIH Threshold Limit Values
WHO	World health organisation
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
CAS-Nr.	Chemical Abstracts Service number
EINECS	European inventory of existing commercial substances
ELINCS	European list of notified chemical substances
TDG	Transportation of Dangerous Goods
N.O.S.	Not otherwise specified
49CFR	Code of Federal Regulations, Title 49
OECD	Organization for Economic Co-operation and Development
UN	United Nations
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
IARC	International Agency for Research on Cancer

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.

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

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