

Penthion™ Fungicide

Version 1.0

Revision Date: 25 March 2021

This SDS adheres to the standards and regulatory requirements of Canada and may not meet the regulatory requirements in other countries.

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name	:	Penthion™ Fungicide :
Tradename/Synonym	:	PENTHIOPYRAD (RS)-N-[2-(1,3-dimethylbutyl)thiophen-3-yl]-1-methyl-3-trifluoromethyl-1H-pyrazole-4-carboxamide
Product Use	:	Fungicide
Manufacturer	:	Belchim Crop Protection Canada Inc. 104 Cooper Dr., Unit 3 Guelph, ON, Canada N1C 0A4
Product Information	:	1-866-613-3336
Medical Emergency	:	1-866-336-2983

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

Caution

Causes moderate eye irritation. Avoid contact with skin, eyes and clothing. May be harmful if swallowed. Avoid breathing vapours or mist. Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before re-use. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. This product is toxic to fish.

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Potential Health Effects

This section includes potential acute adverse effects which could occur if this material is not used according to the label.

Eyes : May cause: Irritation with discomfort, pain, redness, or visual impairment.

Carcinogenicity

None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, or OSHA, as a carcinogen.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No.	Concentration
Penthiopyrad	183675-82-3	20.6 %
Other Ingredients		79.4 %

SECTION 4. FIRST AID MEASURES

Skin contact : Take off all contaminated clothing immediately. Rinse skin immediately with plenty of water for 15-20 minutes.

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 poison control center or doctor for treatment advice.

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- Inhalation : No specific intervention is indicated as the compound is not likely to be hazardous. Consult a physician if necessary.
- Ingestion : Call a poison control center or doctor for treatment advice. Have person sip a glass of water if able to swallow. DO NOT induce vomiting unless directed to do so by a physician or poison control center. Do not give anything by mouth to an unconscious person.
- General advice : Have the product container or label with you when calling a poison control center or doctor, or going for treatment.
For medical emergencies involving this product, call toll free 1-866-336-2983.
See Label for Additional Precautions and Directions for Use.

SECTION 5. FIREFIGHTING MEASURES

- Flammable Properties
- Flash point : 88 °C (190 °F)
Method : Pensky-Martens closed cup - PMCC
- Ignition temperature : 250 °C (482 °F)
- Fire and Explosion Hazard : Hazardous combustion products: Carbon oxides nitrogen oxides (NOx) sulphur oxides Fluorinated compounds
- Suitable extinguishing media : Water spray, Dry chemical, Carbon dioxide (CO2), Foam
- Unsuitable extinguishing media : High volume water jet, (contamination risk)

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Firefighting Instructions : In the event of fire, wear self-contained breathing apparatus. Wear full protective equipment. Prevent fire extinguishing water from contaminating surface water or the ground water system. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
(on small fires) If area is heavily exposed to fire and if conditions permit, let fire burn itself out since water may increase the area contaminated. Cool containers / tanks with water spray.

SECTION 6. ACCIDENTAL RELEASE MEASURES

NOTE: Review FIRE FIGHTING MEASURES and HANDLING (PERSONNEL) sections before proceeding with clean-up. Use appropriate PERSONAL PROTECTIVE EQUIPMENT during clean-up.

Safeguards (Personnel) : Control access to area. Keep people away from and upwind of spill/leak. Ventilate spill area. Take precautionary measures against static discharges. Avoid contact with skin, eyes and clothing. Use personal protective equipment. Refer to protective measures listed in sections 7 and 8.

Spill Cleanup : Clean-up methods - small spillage Soak up with inert absorbent material. Sweep up and shovel into suitable containers for disposal.
Clean-up methods - large spillage Prevent further leakage or spillage. Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13). Large spills should be collected mechanically (remove by pumping) for disposal. Collect leaking liquid in sealable (metal/plastic) containers. Collect and contain contaminated absorbent and dike material for disposal.

Accidental Release Measures : Prevent material from entering sewers, waterways, or low areas. Never return spills in original containers for re-use. Dispose of in accordance with local regulations.

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SECTION 7. HANDLING AND STORAGE

- Handling (Personnel) : Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove clothing/PPE immediately if material gets inside. Wash thoroughly and put on clean clothing. Remove personal protective equipment immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.
- Handling (Physical Aspects) : Keep away from heat and sources of ignition.
- Storage : Do not contaminate water, other pesticides, fertilizer, food or feed in storage. Store product in original container only in a location inaccessible to children and pets. Keep in properly labelled containers. Keep in a dry, cool and well-ventilated place. Avoid extreme heat or cold. Keep container closed when not in use. Keep locked up or in an area accessible only to qualified or authorised persons. Keep out of the reach of children.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

- Engineering controls : When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.
- Personal protective equipment
Skin and body protection : Mixers, loaders, applicators and other handlers must wear:
Long sleeved shirt and long pants
Waterproof gloves
Shoes plus socks
PPE required for early entry to treated areas that is permitted under the

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Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

Coveralls

Chemical resistant gloves made of any waterproof material

Shoes plus socks

Protective measures : Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.
Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. Use this product in accordance with its label.

Exposure Guidelines
Exposure Limit Values

None established.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Form : liquid
Color : light yellow
Odor : like fruit
pH : 5.8 at 10 g/l
Oxidizing : The product is not oxidizing.
Specific gravity : 0.9681
Water solubility : emulsifiable

SECTION 10. STABILITY AND REACTIVITY

Stability : Stable at normal temperatures and storage conditions.
Conditions to avoid : Protect from frost. Heat. Direct sunlight.

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Hazardous decomposition products : Carbon oxides, nitrogen oxides (NOx), sulphur oxides, Fluorinated compounds

SECTION 11. TOXICOLOGICAL INFORMATION

Inhalation 4 h LC50 : > 4.89 mg/l , rat
 Dermal LD50 : > 5,000 mg/kg , rat
 Oral LD50 : > 5,000 mg/kg , rat
 Skin irritation : No skin irritation, rabbit
 Eye irritation : Irritating to eyes., rabbit
 Sensitisation : Causes sensitization., mouse

Penthiopyrad

Repeated dose toxicity : The following effects occurred at levels of exposure that significantly exceed those expected under labeled usage conditions.

Oral
 multiple species

Reduced body weight gain, Liver effects, Thyroid effects, Spleen effects, Gallbladder effects, Liver enlargement, Immune system effects, altered blood chemistry, altered hematology, Organ weight changes, Decreased spleen weight, Increased liver weight

Carcinogenicity : The following effects occurred at levels of exposure that significantly exceed those expected under labeled usage conditions.

A slight increased incidence in tumors was observed in animal studies.

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Mutagenicity	:	Did not cause genetic damage in animals. Did not cause genetic damage in cultured bacterial cells. Genetic damage in cultured mammalian cells was observed in one laboratory test but was not observed in others.
Reproductive toxicity	:	Animal testing did not show any effects on fertility.
Teratogenicity	:	The following effects occurred at levels of exposure that significantly exceed those expected under labeled usage conditions. Animal testing showed effects on embryo-fetal development at levels equal to or above those causing maternal toxicity.

SECTION 12. ECOLOGICAL INFORMATION

Aquatic Toxicity

96 h LC50 : Pimephales promelas (fathead minnow) 0.32 mg/l

48 h EC50 : Daphnia magna (Water flea) 1.2 mg/l

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72 h EbC50 : Pseudokirchneriella subcapitata (green algae) > 1.5 mg/l

Additional ecological information : Environmental Hazards: This product is toxic to fish. For Terrestrial Uses: Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment washwaters or rinsate. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas.



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SECTION 13. DISPOSAL CONSIDERATIONS

- Waste Disposal : Do not contaminate water, food or feed by disposal. Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.
- Container Disposal : Refer to the product label for instructions.
Do not transport if this container is damaged or leaking.

SECTION 14. TRANSPORT INFORMATION

- IATA_C UN number : 3082
- Proper shipping name : Environmentally hazardous substance, liquid, n.o.s. (Penthiopyrad)
- Class : 9
- Packing group : III
- Labelling No. : 9
- IMDG UN number : 3082
- Proper shipping name : Environmentally hazardous substance, liquid, n.o.s. (Penthiopyrad)
- Class : 9
- Packing group : III
- Labelling No. : 9
- Marine pollutant : yes (Penthiopyrad)

Not regulated by DOT/49 CFR unless shipped in bulk package or by water.
Not regulated by TDG when transported solely on land by road or railway vehicle.

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SECTION 15. REGULATORY INFORMATION

Registration # 33985, Pest Control Products Act

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.

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 registered 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:

DANGER – EYE IRRITANT
SKIN IRRITANT
POTENTIAL SKIN SENSITIZER

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

MSDS preparation date : 25 March 2021

Contact person : Belchim Crop Protection Canada Inc., 104 Cooper Dr., Unit 3 Guelph, ON, Canada N1C 0A4

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.