

SAFETY DATA SHEET



Fontelis® Fungicide

Version 0.0

Document no. 130000012055

Revision Date 00.00.0000

Issue Date 24.12.2019

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

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product name : Fontelis® Fungicide

Other names : B12894457
DPX-LEM17 200 g/L SC

Recommended use of the chemical and restriction on use

Recommended use : Fungicide

Restrictions on use : Do not use product for anything outside of the above specified uses.

Manufacturer, importer, supplier, representative office

Company : DuPont (New Zealand) Limited
Street address : 89 Paritutu Road, New Plymouth, 4310
New Zealand

Customer Information Number: 0800-803-939
NZCustomerservice@corteva.com

EMERGENCY TELEPHONE NUMBER

24-Hour Emergency Contact: 0800 844 455
Local Emergency Contact: +64 6 751 2407

For medical advice, contact the New Zealand Poisons Information Centre:
0800 POISON (0800 764 766)
Transport Emergency Only Dial: 111

2. HAZARDS IDENTIFICATION

Classified as hazardous according to criteria in the New Zealand Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001. Refer to Section 15 for HSNO Approval Number.
Classified as a Dangerous Good according to NZS 5433

HSNO Classification:

6.5B : Skin sensitisation
6.9B : Specific Target Organ Toxicity
9.1A : Very toxic to aquatic life with long lasting effects

Endpoints which are not classified, cannot be classified or are not applicable are not shown.

Label content

Pictogram :



SAFETY DATA SHEET



Fontelis® Fungicide

Version 0.0

Document no. 130000012055

Revision Date 00.00.0000

Issue Date 24.12.2019

- Signal word : Warning
- Hazardous warnings : May cause an allergic skin reaction.
May cause damage to organs through prolonged or repeated exposure.
Very toxic to aquatic life with long lasting effects.
- Precautionary statements : Do not breathe gas/ mist/ vapours/ spray.
Wear protective gloves.
IF ON SKIN: Wash with plenty of soap and water.
Get medical advice/ attention if you feel unwell.
Specific treatment (see supplemental first aid instructions on this label).
If skin irritation or rash occurs: Get medical advice/ attention.
Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before re-use.
Avoid release to the environment.
Collect spillage.
Dispose of contents/ container to an approved waste disposal plant.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature : Mixture

Components

| Chemical name | CAS-No. | Concentration |
|-------------------------------|-------------|---------------|
| Penthiopyrad | 183675-82-3 | 20.35 % |
| White mineral oil (petroleum) | 8042-47-5 | 40 - 50 % |
| Propane-1,2-diol | 57-55-6 | 3 - 10 % |
| 1,2-Benzisothiazol-3(2H)-one | 2634-33-5 | < 0.1 % |
| Other Ingredients | | 10 - 19.5 % |

4. FIRST AID MEASURES

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. Artificial respiration and/or oxygen may be necessary. Call a poison control center or doctor for treatment advice.
- Skin contact** : Take off contaminated clothing and shoes immediately. Wash off immediately with soap and plenty of water. In the case of skin irritation or allergic reactions see a physician. Wash contaminated clothing before re-use.
- Eye contact** : Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, consult a specialist.
- Ingestion** : Call a poison control center or doctor for treatment advice. DO NOT induce vomiting unless directed to do so by a physician or poison control center. If victim is conscious: Rinse mouth with water. Do not give anything by mouth to an unconscious person.

SAFETY DATA SHEET



Fontelis® Fungicide

Version 0.0

Document no. 130000012055

Revision Date 00.00.0000

Issue Date 24.12.2019

- Most important symptoms/effects, acute and delayed** : No information available.
- Protection of first-aiders** : No information available.
- Notes to physician** : Treat symptomatically.

5. FIREFIGHTING MEASURES

- Suitable extinguishing media** : Water spray, Dry chemical, Carbon dioxide (CO₂), Foam
- Unsuitable extinguishing media** : High volume water jet, (contamination risk)
- Specific hazards** : Hazardous combustion products: Carbon oxides. Nitrogen oxides (NO_x). Sulphur oxides. Fluorinated compounds
- Special protective equipment for firefighters** : In the event of fire, wear self-contained breathing apparatus. Wear full protective equipment.
- Specific extinguishing methods** : No information available.
- Further information** : 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.
- Hazchem Code** : •3Z

6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures** : Evacuate personnel, thoroughly ventilate area, use self-contained breathing apparatus. Use personal protective equipment.
- Environmental precautions** : Prevent material from entering sewers, waterways, or low areas.

SAFETY DATA SHEET



Fontelis® Fungicide

Version 0.0

Document no. 130000012055

Revision Date 00.00.0000

Issue Date 24.12.2019

- Methods and materials for containment and cleaning up** : 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.
- Additional advice** : Never return spills in original containers for re-use. Dispose of in accordance with local regulations.

7. HANDLING AND STORAGE

Handling

- Technical measures/Precautions : Do not breathe spray mist.
- Precautions for safe handling : Keep away from heat and sources of ignition.

Storage

- Suitable storage conditions : 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. Observe label precautions.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Applicable occupational exposure limits are listed below.

| White mineral oil (petroleum) | | |
|-------------------------------|---|---------------------|
| WES-TWA | 5 mg/m ³ (Mist) | NZ OEL (2013-02-01) |
| WES-STEL | 10 mg/m ³ (Mist) | NZ OEL (2013-02-01) |
| TWA | 5 mg/m ³ (Inhalable particulate matter) | ACGIH (2013-03-01) |
| Propane-1,2-diol | | |
| WES-TWA | 10 mg/m ³ (particulate) | NZ OEL (2013-02-01) |
| WES-TWA | 150 ppm 474 mg/m ³ (Vapour and particulates) | NZ OEL (2013-02-01) |

- Engineering measures** : Ensure adequate ventilation, especially in confined areas.
- Biological occupational exposure limits** : No information available.

Fontelis® Fungicide

Version 0.0

Document no. 130000012055

Revision Date 00.00.0000

Issue Date 24.12.2019

Personal protective equipment

- Respiratory protection : None specified.
- Hand protection : Material: Waterproof gloves
- Eye protection : None specified.
- Skin protection : Wear cotton overalls buttoned to neck and wrist, and a washable hat.

Hygiene measures : No information available.

Protective measures : 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.

9. PHYSICAL AND CHEMICAL PROPERTIES**Appearance (Physical state, form, colour, etc.)**

- Physical state : Liquid
- Form : Liquid
- Colour : Off-white

Odour : Slight ester-like

Odour Threshold : Not determined

pH : 6.66 (10 g/l)

Melting point/freezing point

No information available.

Initial boiling point and boiling range

No information available.

Flash point : > 105 °C

Evaporation rate : Not available for this mixture.

Flammability (solid, gas) : No information available.

Upper/lower flammability or explosive limits

- Upper explosion limit : No information available.
- Lower explosion limit : No information available.

Vapour pressure : No information available.

Vapour density : No information available.

Density

- Specific gravity : 0.9789
- (Relative density)

Fontelis® Fungicide

Version 0.0

Document no. 130000012055

Revision Date 00.00.0000

Issue Date 24.12.2019

Solubility(ies)

Water solubility : dispersible

Partition coefficient: n-octanol/water

: Not applicable

Auto-ignition temperature

Auto-ignition temperature : ca.385 °C

Ignition temperature : 385 °C

Decomposition temperature

: No information available.

Viscosity

Viscosity, kinematic : No information available.

Molecular weight

: No information available.

Oxidizing properties

: The product is not oxidizing.

10. STABILITY AND REACTIVITY**Reactivity** : No information available.**Chemical stability** : Stable at normal temperatures and storage conditions.**Possibility of hazardous reactions** : No dangerous reaction known under conditions of normal use. Polymerization will not occur.**Conditions to avoid** : Protect from frost. Heat Direct sunlight.**Materials to avoid** : Strong oxidizing agents**Hazardous decomposition products** : Carbon oxides, Nitrogen oxides (NOx), Sulphur oxides, Fluorinated compounds**11. TOXICOLOGICAL INFORMATION****Acute toxicity****Oral**Penthiopyrad : LD50/Rat: > 2,000 mg/kg
The substance or mixture has no acute oral toxicityWhite mineral oil (petroleum) : LD50/Rat: > 5,000 mg/kg
Method: OECD Test Guideline 401
The substance or mixture has no acute oral toxicityPropane-1,2-diol : LD50/Rat: 22,000 mg/kg
1,2-Benzisothiazol-3(2H)-one : LD50/Rat: 670 mg/kg
Central nervous system effects**Inhalation**Fontelis® fungicide : LC50/4 h/Rat(dust/mist): > 3.5 mg/l
The substance or mixture has no acute inhalation toxicity**Dermal**

Fontelis® fungicide : LD50/Rat: > 5,000 mg/kg

Fontelis® Fungicide

Version 0.0

Document no. 130000012055

Revision Date 00.00.0000

Issue Date 24.12.2019

Skin corrosion/irritation

Fontelis® fungicide : Species: Rabbit
Result: No skin irritation

Serious eye damage/eye irritation

Fontelis® fungicide : Species: Rabbit
Result: No eye irritation

Respiratory or skin sensitisation

Fontelis® fungicide : Species: Guinea pig
Result: May cause sensitisation by skin contact.

Germ cell mutagenicity

Penthiopyrad : Animal testing did not show any mutagenic effects. 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.

White mineral oil (petroleum) : Animal testing did not show any mutagenic effects. Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

Propane-1,2-diol : Animal testing did not show any mutagenic effects. Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

1,2-Benzisothiazol-3(2H)-one : Tests on bacterial or mammalian cell cultures did not show mutagenic effects. Animal testing did not show any mutagenic effects.

Carcinogenicity

Penthiopyrad : Not classifiable as a human carcinogen. The following effects occurred at levels of exposure that significantly exceed those expected under labeled usage conditions. A slight increased incidence in tumours was observed in animal studies: Liver. Thyroid

White mineral oil (petroleum) : Not classifiable as a human carcinogen.
Animal testing did not show any carcinogenic effects.

Propane-1,2-diol : Animal testing did not show any carcinogenic effects.

Reproductive toxicity

Penthiopyrad : Reproductive toxicity: No toxicity to reproduction
Teratogenicity: No toxicity to reproduction
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.

White mineral oil (petroleum) : Reproductive toxicity: No toxicity to reproduction
Animal testing showed no reproductive toxicity.
No effects on or via lactation
Teratogenicity: Animal testing showed no developmental toxicity.

Propane-1,2-diol : Reproductive toxicity: No toxicity to reproduction
Animal testing showed no reproductive toxicity.
No effects on or via lactation
Teratogenicity: Animal testing showed no developmental toxicity.

Fontelis® Fungicide

Version 0.0

Revision Date 00.00.0000

Document no. 130000012055

Issue Date 24.12.2019

- 1,2-Benzisothiazol-3(2H)-one : Reproductive toxicity: No toxicity to reproduction
 Animal testing showed effects on reproduction at levels equal to or above those causing parental toxicity.
 Teratogenicity: Animal testing showed effects on embryo-fetal development at levels equal to or above those causing maternal toxicity.

Specific Target Organ Toxicity

Specific target organ toxicity - single exposure

- Penthiopyrad : The substance or mixture is not classified as specific target organ toxicant, single exposure.
 White mineral oil (petroleum) : The substance or mixture is not classified as specific target organ toxicant, single exposure.
 Propane-1,2-diol : The substance or mixture is not classified as specific target organ toxicant, single exposure.

Specific target organ toxicity - repeated exposure

- Penthiopyrad : The substance or mixture is not classified as specific target organ toxicant, repeated exposure.
 White mineral oil (petroleum) : The substance or mixture is not classified as specific target organ toxicant, repeated exposure.
 Propane-1,2-diol : The substance or mixture is not classified as specific target organ toxicant, repeated exposure.
 1,2-Benzisothiazol-3(2H)-one : The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Aspiration hazard

- Penthiopyrad : No aspiration toxicity classification
 Propane-1,2-diol : No aspiration toxicity classification
 1,2-Benzisothiazol-3(2H)-one : No aspiration toxicity classification

Other

- Penthiopyrad : Repeated dose toxicity: No toxicological effects warranting significant target organ toxicity classification were seen below the recommended guidance values for classification. 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
- White mineral oil (petroleum) : Repeated dose toxicity:
 Ingestion/Rat 90 d
 NOAEL: 1,815 mg/kg
 LOAEL: > 1,815 mg/kg
 Method: OECD Test Guideline 408
 No toxicologically significant effects were found.
- Inhalation/Rat 28 d
 NOAEL: 1.0 mg/l
 Method: OECD Test Guideline 412
 lung effects

Fontelis® Fungicide

Version 0.0

Document no. 130000012055

Revision Date 00.00.0000

Issue Date 24.12.2019

| | |
|------------------------------|--|
| | <p>Dermal/Rat 13 Weeks NOAEL: > 2,000 mg/kg LOAEL: 120 mg/kg Method: OECD Test Guideline 411 Skin effects</p> |
| Propane-1,2-diol | <p>: Repeated dose toxicity: Ingestion/Cat 94 d NOAEL: 443 mg/kg LOAEL: 4,239 mg/kg No toxicologically significant effects were found.</p> <p>Inhalation/Rat 90 d NOAEL: > 2.2 mg/l LOAEL: 0.16 mg/l No toxicologically significant effects were found.</p> |
| 1,2-Benzisothiazol-3(2H)-one | <p>: Repeated dose toxicity: Oral/Rat No toxicologically significant effects were found.</p> |

12. ECOLOGICAL INFORMATION**Ecotoxicity effects**

Acute and prolonged toxicity to fish

Fontelis® fungicide : LC50/96 h/Oncorhynchus mykiss (rainbow trout): 0.36 mg/l

Toxicity to aquatic plants

Fontelis® fungicide : ErC50/72 h/Pseudokirchneriella subcapitata (green algae): > 2.1 mg/l
Method: OECD Test Guideline 201
(Data on the product itself), Information source: Internal study report

Acute toxicity to aquatic invertebrates

Fontelis® fungicide : EC50/48 h/Daphnia magna (Water flea): 0.060 mg/l

Chronic toxicity to aquatic Invertebrates

Fontelis® fungicide : NOEC/21 d: 0.01061 mg/l

Persistence and degradability

Fontelis® fungicide : Not readily biodegradable. Estimation based on data obtained on active ingredient.

Bioaccumulation

Propane-1,2-diol : Bioaccumulation is unlikely.

1,2-Benzisothiazol-3(2H)-one : Bioaccumulation is unlikely.

Mobility in soil

No information available.

Other adverse effects

No information available.

SAFETY DATA SHEET



Fontelis® Fungicide

Version 0.0

Document no. 130000012055

Revision Date 00.00.0000

Issue Date 24.12.2019

13. DISPOSAL CONSIDERATIONS

- Waste disposal methods** : Must be incinerated in a suitable incineration plant holding a permit delivered by the competent authorities. Triple or preferably pressure rinse containers before disposal. Add rinsings to spray tank. DO NOT dispose of undiluted chemicals on-site. If recycling, replace cap and return clean containers to recycler or designated collection point. If not recycling, break, crush, or puncture, and bury empty containers in a local authority landfill. If no landfill is available, bury the containers below 500 mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Empty containers and product should not be burnt.
- Contaminated packaging** : Do not re-use empty containers.

14. TRANSPORT INFORMATION

Classification for ROAD and Rail transport:

UN number : 3082
UN proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Penthiopyrad)
Transport hazard class : 9
Packing group : III

Classification for SEA transport (IMO-IMDG):

UN number : 3082
UN proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Penthiopyrad)
Transport hazard class : 9
Packing group : III
Marine pollutant : yes (Penthiopyrad)

Classification for AIR transport (IATA/ICAO):

UN number : 3082
UN proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Penthiopyrad)
Transport hazard class : 9
Packing group : III

Special precaution which a user to be aware of or needs to comply with in connection with transport or conveyance either within or outside their premises : Marine Pollutants in single or combination packaging containing a net quantity per single or inner packaging of 5 L or less for liquids or having a net mass per single or inner packaging of 5 KG or less for solids may be transported as non-dangerous goods as provided in section 2.10.2.7 of IMDG code and IATA special provision A197. If the product meets these special provisions, it may be shipped in New Zealand as a non-dangerous goods under provisions in NZS 5433 code which accepts IMDG and IATA classification.

15. REGULATORY INFORMATION

NZ EPA New Zealand Approval Code (HSNO): HSR100718

ACVM Approval Number: P008528

Fontelis® Fungicide

Version 0.0

Document no. 130000012055

Revision Date 00.00.0000

Issue Date 24.12.2019

16. OTHER INFORMATION**References**

SDS Number: 130000012055

Revision Date/Version

Date of first preparation : 22.10.2015

Revision Date : 24.12.2019

Version : 3.0

Before use read DuPont's safety information.

Take notice of the directions of use on the label.

Significant change from previous version is denoted with a double bar.

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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The above information relates only to the specific material(s) designated herein and may not be valid for such material(s) used in combination with any other materials or in any process or if the material is altered or processed, unless specified in the text.