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**: DuPont™ Fontelis™ Fungicide
- **Tradename/Synonym**: DPX-LEM17 20 SC Fungicide
  - DPX-LEM17 200 g/L SC
  - DPX-LEM17 20SC
  - PENTHIOPYRAD (RS)-N-[2-(1,3-dimethylbutyl)thiophen-3-yl]-1-methyl-3-trifluoromethyl-1H-pyrazole-4-carboxamide
  - B12894457
- **MSDS Number**: 130000012055
- **Product Use**: Fungicide
- **Manufacturer**: E.I. du Pont Canada Company
  - P.O. Box 2200, Streetsville
  - Mississauga, ON
  - L5M 2H3
  - Canada
- **Product Information**: 1-800-387-2122
- **Medical Emergency**: 1-800-441-3637 (24 hours)

SECTION 2. HAZARDS IDENTIFICATION

**Emergency Overview**

**Caution**
May be harmful if swallowed. Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Avoid contact with skin, eyes and clothing. Remove and wash contaminated clothing before re-use. Avoid breathing vapours or mist.

This product is toxic to fish.
## DuPont™ Fontelis™ Fungicide

**Version 2.0**

**Revision Date 02/09/2012**

Ref. 130000012055

### Potential Health Effects

#### Carcinogenicity

<table>
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<tr>
<th>Material</th>
<th>IARC</th>
<th>OSHA</th>
<th>ACGIH</th>
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<tbody>
<tr>
<td>White mineral oil</td>
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<tr>
<td>(petroleum)</td>
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### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS-No.</th>
<th>Concentration</th>
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<tbody>
<tr>
<td>Penthiopyrad</td>
<td>183675-82-3</td>
<td>20.4 %</td>
</tr>
<tr>
<td>Other Ingredients</td>
<td></td>
<td>79.6 %</td>
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</table>

### SECTION 4. FIRST AID MEASURES

#### Skin contact

Take off all contaminated clothing immediately. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

#### 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.
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 1-800-441-3637. See Label for Additional Precautions and Directions for Use.

Notes to physician: Treat symptomatically.

SECTION 5. FIREFIGHTING MEASURES

Flammable Properties
Flash point: > 105 °C (> 221 °F)
Ignition temperature: 385 °C (725 °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)
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) : Evacuate personnel, thoroughly ventilate area, use self-contained breathing apparatus. Use personal protective equipment.

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.

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 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 : Ensure adequate ventilation, especially in confined areas.

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 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

<table>
<thead>
<tr>
<th></th>
<th>TLV</th>
<th>(ACGIH)</th>
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<th>TWA</th>
<th>Inhalable fraction.</th>
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<tr>
<td>White mineral oil (petroleum)</td>
<td>5 mg/m³</td>
<td>10 mg/m³</td>
<td>5 mg/m³</td>
<td>STEL Mist.</td>
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<tr>
<td></td>
<td>TLV</td>
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<td>TWA</td>
<td>Mist.</td>
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<td>(ACGIH)</td>
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SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

- Form: liquid
- Color: off-white
- Odor: slight, ester-like
- pH: 6.66 at 10 g/l
- Oxidizing: The product is not oxidizing.
- Specific gravity: 0.9789
- Water solubility: dispersible

SECTION 10. STABILITY AND REACTIVITY

- Stability: Stable at normal temperatures and storage conditions.
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Conditions to avoid:

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

SECTION 11. TOXICOLOGICAL INFORMATION

Inhalation 4 h LC50: > 3.5 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:
- No eye irritation, rabbit

Sensitisation:
- Animal test did not cause sensitization by skin contact., guinea pig

Penthiopyrad

Repeted 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.

**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**
  - Oncorhynchus mykiss (rainbow trout) 0.36 mg/l
- **72 h EbC50**
  - Pseudokirchneriella subcapitata (green algae) 1.5 mg/l
- **72 h ErC50**
  - Pseudokirchneriella subcapitata (green algae) > 2.1 mg/l
- **48 h EC50**
  - Daphnia magna (Water flea) 0.060 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.

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

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</tbody>
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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.
SECTION 15. REGULATORY INFORMATION

PCP Registration # : 30331
Remarks : Regulated under the Pest Control Products Act - WHMIS exempt.

SECTION 16. OTHER INFORMATION

MSDS preparation date : 02/09/2012

™ Trademark of E.I. du Pont de Nemours and Company.

Contact person : E.I. DuPont Canada Company, Mississauga, Ontario, L5M 2H3

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