

Revision date : 2011/02/01 Page: 1/6
Version: 2.0 (30484625/SDS\_CPA\_CA/EN)

# 1. Product and Company Identification

Use: crop protection product, herbicide

Company
BASF Canada Inc.
100 Milverton Drive
Mississauga, ON L5R 4H1
CANADA

24 Hour Emergency Response Information CANUTEC (reverse charges): (613) 996-6666 BASF HOTLINE: (800) 454-COPE (2673)

Molecular formula: C13 H19 N3 O4 PCP 29542 Synonyms: pendimethalin

# 2. Hazards Identification

## **Emergency overview**

Contains 1,2-benzisothiazolin-3-one as a preservative. Contains 2-methyl-4-isothiazolin-3-one as a preservative. Causes eye irritation.

HARMFUL IF ABSORBED THROUGH SKIN.

HARMFUL IF SWALLOWED.

KEEP OUT OF REACH OF CHILDREN.

Avoid contact with the skin, eyes and clothing.

State of matter: liquid Colour: dark orange Odour: faint odour, nutty

# Potential health effects

Irritation / corrosion:

Moderately irritating to the eyes.

# 3. Composition / Information on Ingredients

Not WHMIS controlled.

Revision date : 2011/02/01 Page: 2/6
Version: 2.0 (30484625/SDS\_CPA\_CA/EN)

## 4. First-Aid Measures

#### General advice:

Remove contaminated clothing.

#### If inhaled:

Remove the affected individual into fresh air and keep the person calm.

Assist in breathing if necessary.

#### If on skin:

Rinse skin immediately with plenty of water for 15 - 20 minutes.

Remove contaminated clothing. If irritation develops, seek medical attention.

#### If in eyes

Hold eyes open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after first 5 minutes, then continue rinsing.

#### If swallowed:

Never induce vomiting or give anything by mouth if the victim is unconscious or having convulsions. Do not induce vomiting. Have person sip a glass of water if able to swallow.

# 5. Fire-Fighting Measures

Flash point: > 110 °C

Autoignition: not applicable
Self-ignition temperature: not self-igniting

# Suitable extinguishing media:

foam, dry powder, carbon dioxide, water spray

#### Hazards during fire-fighting:

carbon monoxide, carbon dioxide, nitrogen dioxide, nitrogen oxide, Hydrocarbons,

If product is heated above decomposition temperature, toxic vapours will be released. The substances/groups of substances mentioned can be released in case of fire.

## Protective equipment for fire-fighting:

Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.

## Further information:

Evacuate area of all unnecessary personnel. Contain contaminated water/firefighting water. Do not allow to enter drains or waterways.

## 6. Accidental release measures

## Personal precautions:

Take appropriate protective measures. Clear area. Shut off source of leak only under safe conditions. Extinguish sources of ignition nearby and downwind. Ensure adequate ventilation. Wear suitable personal protective clothing and equipment.

#### **Environmental precautions:**

Do not discharge into the subsoil/soil. Do not discharge into drains/surface waters/groundwater. Contain contaminated water/firefighting water.

#### Cleanup

Dike spillage. Pick up with suitable absorbent material. Place into suitable containers for reuse or disposal in a licensed facility. Spilled substance/product should be recovered and applied according to label rates whenever

Revision date: 2011/02/01 Page: 3/6 Version: 2.0 (30484625/SDS\_CPA\_CA/EN)

possible. If application of spilled substance/product is not possible, then spills should be contained, solidified, and placed in suitable containers for disposal. After decontamination, spill area can be washed with water. Collect wash water for approved disposal.

# 7. Handling and Storage

#### **Handling**

#### General advice:

Provide good ventilation of working area (local exhaust ventilation if necessary). Keep away from sources of ignition - No smoking. Keep container tightly sealed. Protect contents from the effects of light. Protect against heat. Protect from air. Handle and open container with care. Do not open until ready to use. Once container is opened, content should be used as soon as possible. Avoid aerosol formation. Avoid dust formation. Provide means for controlling leaks and spills. Do not return residues to the storage containers. Follow label warnings even after container is emptied. The substance/ product may be handled only by appropriately trained personnel. Avoid contact with the skin, eyes and clothing. Avoid inhalation of dusts/mists/vapours. Wear suitable personal protective clothing and equipment.

#### **Storage**

### General advice:

Keep only in the original container in a cool, dry, well-ventilated place away from ignition sources, heat or flame. Protect containers from physical damage. Protect against contamination. Store protected against freezing.

#### Storage incompatibility:

General advice: Segregate from incompatible substances. Segregate from foods and animal feeds. Segregate from textiles and similar materials.

# 8. Exposure Controls and Personal Protection

Users of a pesticidal product should refer to the product label for personal protective equipment requirements.

## Advice on system design:

Whenever possible, engineering controls should be used to minimize the need for personal protective equipment.

## Personal protective equipment

#### Respiratory protection:

Wear respiratory protection if ventilation is inadequate. Wear a NIOSH-certified (or equivalent) TC23C Chemical/Mechanical type filter system to remove a combination of particles, gas and vapours.

## Hand protection:

Chemical resistant protective gloves

#### Eye protection:

Safety glasses with side-shields. Tightly fitting safety goggles (chemical goggles). Wear face shield if splashing hazard exists.

# **Body protection:**

Body protection must be chosen depending on activity and possible exposure, e.g. head protection, apron, protective boots, chemical-protection suit.

#### General safety and hygiene measures:

Wear long sleeved work shirt and long work pants in addition to other stated personal protective equipment. Work place should be equipped with a shower and an eye wash. Handle in accordance with good industrial hygiene and safety practice.

Revision date: 2011/02/01 Page: 4/6 Version: 2.0 (30484625/SDS\_CPA\_CA/EN)

# 9. Physical and Chemical Properties

Odour: faint odour, nutty
Odour threshold: No data available.
Colour: dark orange
7 - 8

pH value: 7 - 8 Freezing point: -9 °C

Density: 1.17 g/cm3 (20 °C)
Bulk density: not applicable
Partitioning coefficient n- not applicable

octanol/water (log Pow):

Viscosity, dynamic: 128 mPa.s (20 °C) (OECD 114) 163 mPa.s (20 °C) (OECD 114)

Solubility in water: dispersible

# 10. Stability and Reactivity

#### Conditions to avoid:

Avoid all sources of ignition: heat, sparks, open flame. Avoid extreme temperatures. Avoid prolonged exposure to extreme heat. Avoid contamination. Avoid electro-static discharge. Avoid prolonged storage.

### Substances to avoid:

strong oxidizing agents

#### **Hazardous reactions:**

The product is chemically stable.

Hazardous polymerization will not occur. No hazardous reactions if stored and handled as prescribed/indicated.

### **Decomposition products:**

No hazardous decomposition products if stored and handled as prescribed/indicated., Prolonged thermal loading can result in products of degradation being given off.

#### Thermal decomposition:

Possible thermal decomposition products:

carbon monoxide, carbon dioxide, nitrogen dioxide, nitrogen oxide, Hydrocarbons

Stable at ambient temperature. If product is heated above decomposition temperature toxic vapours may be released.

# Corrosion to metals:

Corrosive effect on: brass mild steel

# Oxidizing properties:

Based on its structural properties the product is not classified as oxidizing.

# 11. Toxicological information

#### **Acute toxicity**

#### Oral:

Type of value: LD50 Species: rat (male/female) Value: > 5,000 mg/kg

#### Inhalation:

Type of value: LC50 Species: rat (male/female) Value: > 5.23 mg/l Exposure time: 4 h No mortality was observed.

Revision date : 2011/02/01 Page: 5/6
Version: 2.0 (30484625/SDS\_CPA\_CA/EN)

Dermal:

Type of value: LD50 Species: rat (male/female) Value: > 5,000 mg/kg

## Irritation / corrosion

Skin:

Species: rabbit Result: non-irritant

Eye:

Species: rabbit Result: non-irritant

Sensitization:

modified Buehler test Species: guinea pig Result: Non-sensitizing.

## **Genetic toxicity**

Information on: pendimethalin

No mutagenic effect was found in various tests with microorganisms and mammals.

-----

# 12. Ecological Information

## **Fish**

Acute:

OECD Guideline 203 static

Oncorhynchus mykiss/LC50 (96 h): > 100 mg/l

## **Aquatic invertebrates**

Acute:

OECD Guideline 202, part 1 static Daphnia magna/EC50 (48 h): > 100 mg/l

# **Aquatic plants**

Toxicity to aquatic plants:

OECD Guideline 201 green algae/EC50 (72 h): 0.56 mg/l

The product has not been tested. The statement has been derived from products of a similar structure or composition.

## Degradability / Persistence Biological / Abiological Degradation

Evaluation: Not readily biodegradable (by OECD criteria).

# 13. Disposal considerations

## Waste disposal of substance:

See product label for disposal and recycling instructions.

# 14. Transport Information

Revision date : 2011/02/01 Page: 6/6
Version: 2.0 (30484625/SDS\_CPA\_CA/EN)

Reference Bill of Lading

# 15. Regulatory Information

## **Federal Regulations**

Registration status:

Chemical DSL, CA released; restriction on quantity / not listed

Crop Protection DSL, CA released / exempt

WHMIS does not apply to this product.

THIS PRODUCT HAS BEEN CLASSIFIED IN ACCORDANCE WITH THE HAZARD CRITERIA OF THE CPR AND THE MSDS CONTAINS ALL THE INFORMATION REQUIRED BY THE CPR.

# 16. Other Information

Recommended use: herbicide

We support worldwide Responsible Care® initiatives. We value the health and safety of our employees, customers, suppliers and neighbors, and the protection of the environment. Our commitment to Responsible Care is integral to conducting our business and operating our facilities in a safe and environmentally responsible fashion, supporting our customers and suppliers in ensuring the safe and environmentally sound handling of our products, and minimizing the impact of our operations on society and the environment during production, storage, transport, use and disposal of our products.

# **MSDS** Prepared by:

BASF NA Product Regulations msds@basf.com

MSDS Prepared on: 2011/02/01

IMPORTANT: WHILE THE DESCRIPTIONS, DESIGNS, DATA AND INFORMATION CONTAINED HEREIN ARE PRESENTED IN GOOD FAITH AND BELIEVED TO BE ACCURATE, IT IS PROVIDED FOR YOUR GUIDANCE ONLY. BECAUSE MANY FACTORS MAY AFFECT PROCESSING OR APPLICATION/USE, WE RECOMMEND THAT YOU MAKE TESTS TO DETERMINE THE SUITABILITY OF A PRODUCT FOR YOUR PARTICULAR PURPOSE PRIOR TO USE. NO WARRANTIES OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE MADE REGARDING PRODUCTS DESCRIBED OR DESIGNS, DATA OR INFORMATION SET FORTH, OR THAT THE PRODUCTS, DESIGNS, DATA OR INFORMATION MAY BE USED WITHOUT INFRINGING THE INTELLECTUAL PROPERTY RIGHTS OF OTHERS. IN NO CASE SHALL THE DESCRIPTIONS, INFORMATION, DATA OR DESIGNS PROVIDED BE CONSIDERED A PART OF OUR TERMS AND CONDITIONS OF SALE. FURTHER, YOU EXPRESSLY UNDERSTAND AND AGREE THAT THE DESCRIPTIONS, DESIGNS, DATA, AND INFORMATION FURNISHED BY BASF HEREUNDER ARE GIVEN GRATIS AND BASF ASSUMES NO OBLIGATION OR LIABILITY FOR THE DESCRIPTION, DESIGNS, DATA AND INFORMATION GIVEN OR RESULTS OBTAINED, ALL SUCH BEING GIVEN AND ACCEPTED AT YOUR RISK.

**END OF DATA SHEET**