

Revision date: 2012/04/27 Page: 1/7
Version: 1.3 (30497825/SDS_CPA_CA/EN)

1. Product and Company Identification

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: C17 H17 Cl F4 N4 O5 S PCP # 29372

Synonyms: Saflufenacil

2. Hazards Identification

Emergency overview

WARNING:

Contains the allergen sulfite(s).
KEEP OUT OF REACH OF CHILDREN.
HARMFUL IF SWALLOWED.
Avoid contact with skin and eyes.
May cause slight irritation to the eyes.
May cause slight irritation to the skin.
Avoid inhalation of dusts/mists/vapours.

State of matter: solid Colour: light brown Odour: mild

Potential health effects

Acute toxicity:

Slightly toxic after single ingestion. Slightly toxic after short-term skin contact. Relatively nontoxic after short-term inhalation.

Irritation / corrosion:

May cause slight irritation to the eyes. May cause slight irritation to the skin.

Sensitization:

Skin sensitizing effects were not observed in animal studies.

Potential environmental effects

Aquatic toxicity:

There is a high probability that the product is not acutely harmful to fish. There is a high probability that the product is not acutely harmful to aquatic invertebrates. Very toxic (acute effect) to aquatic plants.

Revision date : 2012/04/27 Page: 2/7
Version: 1.3 (30497825/SDS_CPA_CA/EN)

Terrestrial toxicity:

With high probability not acutely harmful to terrestrial organisms.

3. Composition / Information on Ingredients

Not WHMIS controlled.

4. First-Aid Measures

General advice:

Avoid contact with the skin, eyes and clothing. Remove contaminated clothing. If difficulties occur: Obtain medical attention. Show container, label and/or safety data sheet to physician.

If inhaled:

Remove the affected individual into fresh air and keep the person calm. If not breathing, give artificial respiration.

If on skin:

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

If in eves

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:

Rinse mouth immediately and then drink plenty of water, seek medical attention. Never induce vomiting or give anything by mouth if the victim is unconscious or having convulsions.

Note to physician

Treatment:

Treat according to symptoms (decontamination, vital functions), no known specific antidote.

5. Fire-Fighting Measures

Flash point: not applicable
Lower explosion limit: not determined
Upper explosion limit: not determined

Self-ignition temperature: 371 °C (Directive 92/69/EEC, A.16)

Suitable extinguishing media:

water spray, foam, dry powder

Unsuitable extinguishing media for safety reasons:

water jet, carbon dioxide

Hazards during fire-fighting:

carbon monoxide, carbon dioxide, ammonia, Hydrogen chloride, nitrogen oxides, sulfur oxides, organochloric compounds

The substances/groups of substances mentioned can be released in case of fire.

Protective equipment for fire-fighting:

Wear self-contained breathing apparatus and chemical-protective clothing.

Further information:

In case of fire and/or explosion do not breathe fumes. Keep containers cool by spraying with water if exposed to fire. Collect contaminated extinguishing water separately, do not allow to reach sewage or effluent systems. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

Revision date: 2012/04/27 Page: 3/7 Version: 1.3 (30497825/SDS_CPA_CA/EN)

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.

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 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:

No special measures necessary if stored and handled correctly.

Protection against fire and explosion:

Dust can form an explosive mixture with air. Avoid deposition of dust. Prevent electrostatic charge - sources of ignition should be kept well clear - fire extinguishers should be kept handy.

Storage

General advice:

Protect against moisture. Keep away from heat. Protect from direct sunlight. Keep container tightly closed in a cool, well-ventilated place.

Storage incompatibility:

General advice: Segregate from foods and animal feeds.

Temperature tolerance

Protect from temperatures above: 40 °C

Changes in the properties of the product may occur if substance/product is stored above indicated temperature for extended periods of time.

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. For situations where the airborne concentrations may exceed the level for which an air purifying respirator is effective, or

Revision date: 2012/04/27 Page: 4/7 Version: 1.3 (30497825/SDS CPA CA/EN)

where the levels are unknown or Immediately Dangerous to Life or Health (IDLH), use NIOSH-certified full facepiece pressure demand self-contained breathing apparatus (SCBA) or a full facepiece pressure demand supplied-air respirator (SAR) with escape provisions.

Hand protection:

Chemical resistant protective gloves, Protective glove selection must be based on the user's assessment of the workplace hazards.

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:

The statements on personal protective equipment in the instructions for use apply when handling crop-protection agents in final-consumer packing. Avoid contact with the skin, eyes and clothing. Wearing of closed work clothing is recommended. Keep away from food, drink and animal feeding stuffs. No eating, drinking, smoking or tobacco use at the place of work. Hands and/or face should be washed before breaks and at the end of the shift. Remove contaminated clothing immediately and dispose of safely. Store work clothing separately.

9. Physical and Chemical Properties

Form: solid, granules

Odour: mild

Odour threshold: No data available. Colour: light brown

pH value: 5.0 (10 g/l, 25 °C)

Density: approx. 1.61 g/cm3 (20 °C)

Bulk density: 540 - 600 kg/m3 (20 °C, 1,013 hPa) Vapour density: not determined Solubility in water: dispersible

10. Stability and Reactivity

Dust explosivity characteristics:

Kst: 139 m.bar/s Pmax = 7.35 bar

ASTM standard method E1226

Dust explosion class:

Dust explosion class 1 (Kst-value >0 up to 200 bar m s-1) (St 1)

Conditions to avoid:

Avoid all sources of ignition: heat, sparks, open flame. Avoid prolonged storage. Avoid electro-static discharge. Avoid contamination. Avoid prolonged exposure to extreme heat. Avoid extreme temperatures. This product may form an explosive mixture if: 1. the dust is suspended in the atmosphere as a dust cloud AND 2. the concentration of the dust is above the lower explosion limit (LEL) AND 3. the limiting oxygen concentration (LOC) is exceeded.

Substances to avoid:

strong oxidizing agents

Hazardous reactions:

The product is chemically stable.

No hazardous reactions if stored and handled as prescribed/indicated.

Decomposition products:

Revision date : 2012/04/27 Page: 5/7 Version: 1.3 (30497825/SDS_CPA_CA/EN)

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:

200 °C, 2.5 K/min (DSC (OECD 113))

250 °C, 2.5 K/min (DSC (OECD 113))

355 °C, 2.5 K/min (DSC (OECD 113))

Corrosion to metals:

Corrosive effects to metal are not anticipated.

Oxidizing properties:

not fire-propagating

11. Toxicological information

Acute toxicity

Oral:

Type of value: LD50

Species: rat

Value: > 2,000 mg/kg

Inhalation:

Type of value: LC50 Value: > 5 mg/l Exposure time: 4 h

Dermal:

Type of value: LD50

Species: rat

Value: > 2,000 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.

12. Ecological Information

Fish

Acute:

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

Aquatic invertebrates

Acute:

static

Revision date : 2012/04/27 Page: 6/7 Version: 1.3 (30497825/SDS_CPA_CA/EN)

Daphnia magna (48 h): > 100 mg/l

Aquatic plants

Toxicity to aquatic plants: green algae/EC50 (72 h): 0.157 mg/l

Other adverse effects:

Do not discharge product into the environment without control.

13. Disposal considerations

Waste disposal of substance:

See product label for disposal and recycling instructions.

Container disposal:

Contaminated packaging should be emptied as far as possible and disposed of in the same manner as the substance/product.

14. Transport Information

Land transport

TDG

Not classified as a dangerous good under transport regulations

Sea transport

IMDG

Hazard class: 9
Packing group: III
ID number: UN 3077
Hazard label: 9, EHSM
Marine pollutant: YES

Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.

(contains SAFLUFENACIL)

Air transport

IATA/ICAO

Hazard class: 9
Packing group: III
ID number: UN 3077
Hazard label: 9, EHSM

Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.

(contains SAFLUFENACIL)

15. Regulatory Information

Federal Regulations

Registration status:

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

Revision date: 2012/04/27 Page: 7/7 (30497825/SDS_CPA_CA/EN) Version: 1.3

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 BASF HOTLINE (800) 454 - COPE (2673) MSDS Prepared on: 2012/04/27

END OF DATA SHEET