

Safety Data Sheet

OPTILL

Revision date : 2016/06/02

Version: 3.0

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(30587040/SDS_CPA_CA/EN)

1. Identification

Product identifier used on the label

OPTILL

Recommended use of the chemical and restriction on use

Recommended use*: herbicide

* The "Recommended use" identified for this product is provided solely to comply with a Federal requirement and is not part of the seller's published specification. The terms of this Safety Data Sheet (SDS) do not create or infer any warranty, express or implied, including by incorporation into or reference in the seller's sales agreement.

Details of the supplier of the safety data sheet

Company:

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

Telephone: +1 289 360-1300

Emergency telephone number

CANUTEC (reverse charges): (613) 996-6666

BASF HOTLINE: (800) 454-COPE (2673)

Other means of identification

Molecular formula: C17 H17 Cl F4 N4 O5 S + C15 H19 N3 O3

PCP # 30756

Synonyms: Saflufenacil + Imazethapyr

2. Hazards Identification

According to Controlled Products Regulations (CPR) (SOR/88-66)

Emergency overview

CAUTION:

WARNING:

Contains the allergen sulfite(s).

CAUSES SKIN IRRITATION.

KEEP OUT OF REACH OF CHILDREN.

Harmful if swallowed.

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Do not get in eyes, on skin, or on clothing.
Avoid inhalation of mists/vapours.

3. Composition / Information on Ingredients

According to Hazardous Products Regulations (HPR) (SOR/2015-17)

<u>CAS Number</u>	<u>Weight %</u>	<u>Chemical name</u>
372137-35-4	17.8 %	Saflufenacil
81335-77-5	50.2 %	imazethapyr
577-11-7	0.1 - 1.0%	sodium-di-ethyl-hexyl-sulfosuccinate
1322-93-6	1.0 - 3.0%	Naphthalenesulfonic acid, bis(1-methylethyl)-, sodium salt
7783-20-2	15.0 - 20.0%	Ammonium sulphate

4. First-Aid Measures

Description of first aid measures

General advice:

Remove contaminated clothing.

If inhaled:

Keep patient calm, remove to fresh air, seek medical attention.

If on skin:

Wash thoroughly with soap and water.

If in eyes:

Wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eye specialist.

If swallowed:

Immediately rinse mouth and then drink 200-300 ml of water, seek medical attention.

Most important symptoms and effects, both acute and delayed

Symptoms: The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11., Further important symptoms and effects are so far not known.

Indication of any immediate medical attention and special treatment needed

Note to physician

Treatment:

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

5. Fire-Fighting Measures

Extinguishing media

Suitable extinguishing media:

foam, dry powder, carbon dioxide, water spray

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Special hazards arising from the substance or mixture

Hazards during fire-fighting:

carbon monoxide, carbon dioxide, Hydrocarbons, sulfur oxides, nitrogen oxides, acid halides, halogenated compounds

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.

Advice for fire-fighters

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, protective equipment and emergency procedures

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.

Methods and material for containment and cleaning up

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

Precautions for safe handling

Ensure adequate ventilation. Keep away from sources of ignition - No smoking. Keep container tightly sealed. 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 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 all direct contact with the substance/product. Avoid contact with the skin, eyes and clothing. Avoid inhalation of dusts/mists/vapours. Wear suitable personal protective clothing and equipment.

Protection against fire and explosion:

The relevant fire protection measures should be noted. Fire extinguishers should be kept handy.

Avoid all sources of ignition: heat, sparks, open flame. Sources of ignition should be kept well clear.

Avoid extreme heat. Keep away from oxidizable substances. Electrical equipment should conform to national electric code. Ground all transfer equipment properly to prevent electrostatic discharge.

Electrostatic discharge may cause ignition.

Conditions for safe storage, including any incompatibilities

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

Further information on storage conditions: 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. The authority permits and storage regulations must be observed. 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/Personal Protection

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

No occupational exposure limits known.

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) organic vapour/particulate respirator. For situations where the airborne concentrations may exceed the level for which an air purifying respirator is effective, or 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:

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. Personal protective equipment should be decontaminated prior to reuse. Gloves must be inspected regularly and prior to each use. Replace if necessary (e.g. pinhole leaks). Take off immediately all contaminated clothing. Store work clothing separately. Hands and/or face should be washed before breaks and at the end of the shift. No eating, drinking, smoking or tobacco use at the place of work. Keep away from food, drink and animal feeding stuffs.

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9. Physical and Chemical Properties

Form:	solid, granules
Odour:	characteristic
Odour threshold:	Not determined due to potential health hazard by inhalation.
Colour:	beige to brown
pH value:	approx. 2 - 4 (1 %(m), 25 °C)
Melting temperature:	approx. 176 - 177 °C The data given are those of the active ingredient.
Flash point:	> 105 °C
Flammability:	not determined
Lower explosion limit:	As a result of our experience with this product and our knowledge of its composition we do not expect any hazard as long as the product is used appropriately and in accordance with the intended use.
Upper explosion limit:	As a result of our experience with this product and our knowledge of its composition we do not expect any hazard as long as the product is used appropriately and in accordance with the intended use.
Bulk density:	510 kg/m ³ (23.5 °C)
Vapour density:	not applicable
Self-ignition temperature:	approx. > 200 °C The statements are based on the properties of the individual components.
Thermal decomposition:	carbon monoxide, carbon dioxide, nitrogen oxide, nitrogen dioxide, Sulphur dioxide, halogenated hydrocarbons, Hydrogen chloride, hydrogen fluoride, Hydrocarbons Stable at ambient temperature. If product is heated above decomposition temperature toxic vapours may be released.
Viscosity, dynamic:	not applicable, the product is a solid
Solubility in water:	dispersible
Evaporation rate:	not applicable

10. Stability and Reactivity

Reactivity

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

Corrosion to metals:

Corrosive effects to metal are not anticipated.

Oxidizing properties:

not fire-propagating

Dust explosivity characteristics:

Kst: 187 m.bar/s

ASTM standard method E1226 (20 liter dust sphere)

Pmax = 7.95 bar

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Chemical stability

The product is stable if stored and handled as prescribed/indicated.

Possibility of hazardous reactions

The product is chemically stable.

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

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. 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.

Incompatible materials

strong oxidizing agents

Hazardous decomposition products

Decomposition products:

Hazardous decomposition products: No hazardous decomposition products if stored and handled as prescribed/indicated.

Thermal decomposition:

Possible thermal decomposition products:

carbon monoxide, carbon dioxide, nitrogen oxide, nitrogen dioxide, Sulphur dioxide, halogenated hydrocarbons, Hydrogen chloride, hydrogen fluoride, Hydrocarbons

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

11. Toxicological information

Primary routes of exposure

Routes of entry for solids and liquids are ingestion and inhalation, but may include eye or skin contact. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.

Acute Toxicity/Effects

Acute toxicity

Assessment of acute toxicity: Slightly toxic after single ingestion. Relatively nontoxic after short-term inhalation. Slightly toxic after short-term skin contact.

Oral

Type of value: LD50

Species: rat

Value: > 2,000 mg/kg

No mortality was observed.

Inhalation

Type of value: LC50

Species: rat

Value: > 5.121 mg/l

Tested as dust aerosol.

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Dermal

Type of value: LD50

Species: rat (male/female)

Value: > 2,000 mg/kg

No mortality was observed.

Assessment other acute effects

Assessment of STOT single:

The available information is not sufficient for evaluation.

Irritation / corrosion

Assessment of irritating effects: May cause slight irritation to the skin. May cause slight irritation to the eyes.

Skin

Species: rabbit

Result: non-irritant

Eye

Species: rabbit

Result: non-irritant

Sensitization

Assessment of sensitization: There is no evidence of a skin-sensitizing potential.

modified Buehler test

Species: guinea pig

Result: Non-sensitizing.

Aspiration Hazard

No aspiration hazard expected. The product has not been tested. The statement has been derived from the properties of the individual components.

Chronic Toxicity/Effects

Repeated dose toxicity

Assessment of repeated dose toxicity: The product has not been tested. The statement has been derived from the properties of the individual components. No substance-specific organotoxicity was observed after repeated administration to animals.

Genetic toxicity

Assessment of mutagenicity: The product has not been tested. The statement has been derived from the properties of the individual components. Mutagenicity tests revealed no genotoxic potential.

Carcinogenicity

Assessment of carcinogenicity: The product has not been tested. The statement has been derived from the properties of the individual components. The results of various animal studies gave no indication of a carcinogenic effect.

Reproductive toxicity

Assessment of reproduction toxicity: The product has not been tested. The statement has been derived from the properties of the individual components. The results of animal studies gave no indication of a fertility impairing effect.

Teratogenicity

Assessment of teratogenicity: The product has not been tested. The statement has been derived from the properties of the individual components.

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Information on: saflufenacil

Assessment of teratogenicity: Indications of possible developmental toxicity/teratogenicity were seen in animal studies.

Information on: imazethapyr

Assessment of teratogenicity: No indications of a developmental toxic / teratogenic effect were seen in animal studies.

Other Information

Misuse can be harmful to health.

Symptoms of Exposure

The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11., Further important symptoms and effects are so far not known.

Medical conditions aggravated by overexposure

Individuals with pre-existing diseases of the respiratory system, skin or eyes may have increased susceptibility to excessive exposures.

12. Ecological Information

Toxicity

Aquatic toxicity

Assessment of 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.

Toxicity to fish

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

Aquatic invertebrates

EC50 (48 h) > 100 mg/l, *Daphnia magna*

Aquatic plants

EC50 (72 h) 0.262 mg/l (growth rate), *Pseudokirchneriella subcapitata*

EC10 (72 h) 0.069 mg/l (growth rate), *Pseudokirchneriella subcapitata*

Assessment of terrestrial toxicity

With high probability not acutely harmful to terrestrial organisms.

Persistence and degradability

Assessment biodegradation and elimination (H2O)

The product has not been tested. The statement has been derived from the properties of the individual components.

Assessment biodegradation and elimination (H2O)

Information on: saflufenacil

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Not readily biodegradable (by OECD criteria).

Information on: 3-Pyridinecarboxylic acid, 2-[4,5-dihydro-4-methyl-4-(1-methylethyl)-5-oxo- 1H-imidazol-2-yl]-5-ethyl-

Not readily biodegradable (by OECD criteria).

Bioaccumulative potential

Assessment bioaccumulation potential

The product has not been tested. The statement has been derived from the properties of the individual components.

Assessment bioaccumulation potential

Information on: saflufenacil

Because of the n-octanol/water distribution coefficient (log Pow) accumulation in organisms is not to be expected.

Bioaccumulation potential

Information on: 3-Pyridinecarboxylic acid, 2-[4,5-dihydro-4-methyl-4-(1-methylethyl)-5-oxo- 1H-imidazol-2-yl]-5-ethyl-

Because of the n-octanol/water distribution coefficient (log Pow) accumulation in organisms is not to be expected.

Mobility in soil

Assessment transport between environmental compartments

The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: saflufenacil

Following exposure to soil, the product trickles away and can - dependant on degradation - be transported to deeper soil areas with larger water loads.

Information on: 3-Pyridinecarboxylic acid, 2-[4,5-dihydro-4-methyl-4-(1-methylethyl)-5-oxo- 1H-imidazol-2-yl]-5-ethyl-

Following exposure to soil, the product trickles away and can - dependant on degradation - be transported to deeper soil areas with larger water loads.

Additional information

Other ecotoxicological advice:

Do not discharge product into the environment without control.

13. Disposal considerations

Waste disposal of substance:

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Pesticide wastes are regulated. Dispose of in accordance with local authority regulations. Do not discharge substance/product into sewer system. See product label for disposal and recycling instructions.

Container disposal:

Empty contaminated containers/packaging must be handled according to applicable regulations for the hazardous properties of the contaminating material. Consult the product label for additional details.

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 IMAZETHAPYR)

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 IMAZETHAPYR)

15. Regulatory Information

Federal Regulations

Registration status:

Crop Protection DSL, CA released / exempt

Chemical DSL, CA blocked / not listed

According to Controlled Products Regulations (CPR) (SOR/88-66)

WHMIS does not apply to this product.

16. Other Information

SDS Prepared by:

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BASF NA Product Regulations

SDS Prepared on: 2016/06/02

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.

END OF DATA SHEET